





HOME ARTS

FOR

OLD AND YOUNG.

BY

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(AUNT CARRIE.)

ILLUSTRATED.



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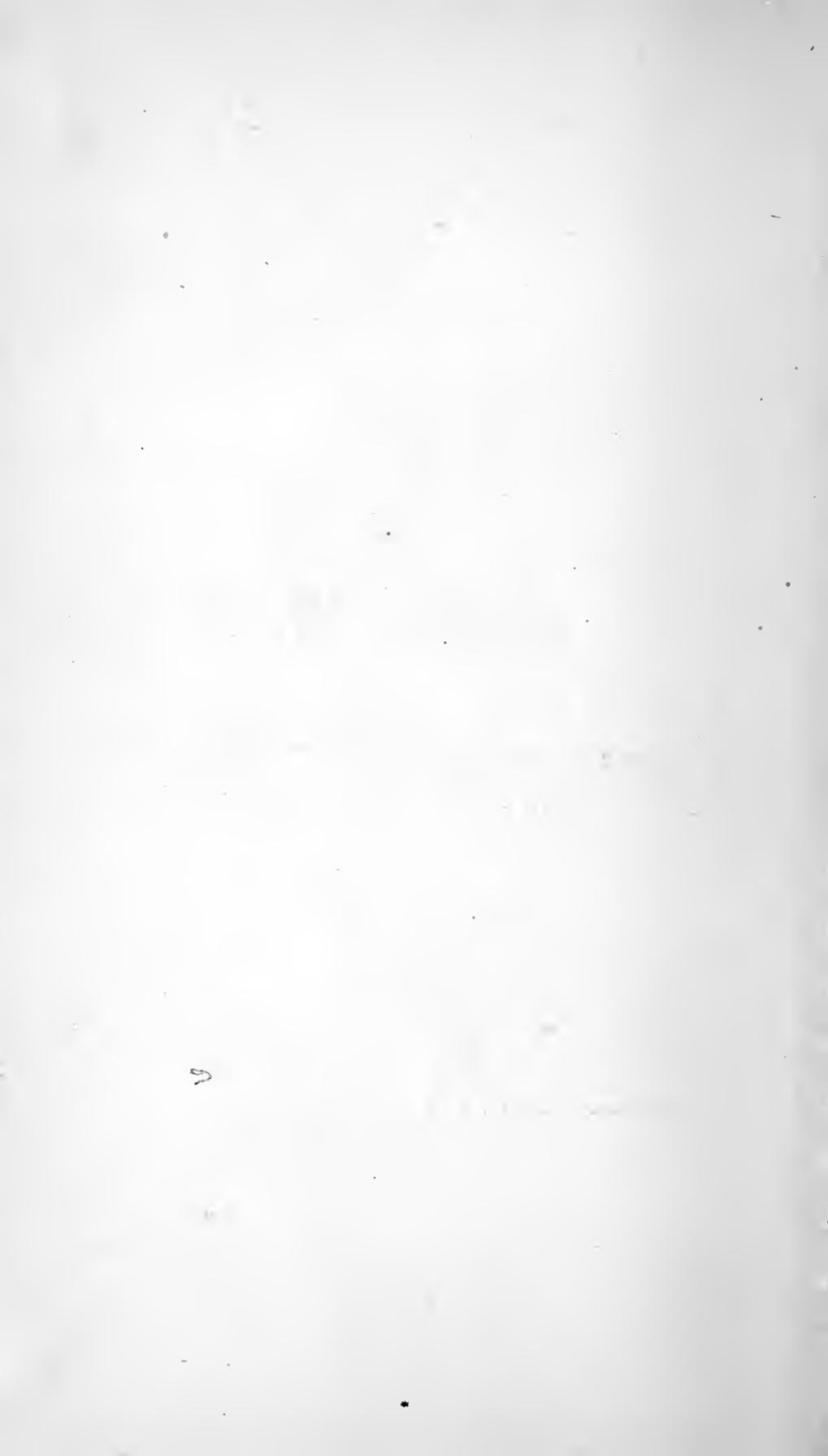
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HOME ARTS

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HOME ARTS.

Christmas.

WE beseech all our youthful readers *not* to pass by our Christmas chapter.

We wish we possessed an abler pen, that would induce every family in the land, rich or poor, to celebrate the birth of our Saviour Jesus Christ, who gave his life for us. Even if some learned men think the twenty-fifth of December is not the day Christ was born, what does it concern us? We know Christ brought love and charity into the world, therefore in gratitude we should celebrate his birth; the exact period is of but little consequence.

Seldon informs us that the Christian church, desirous of abolishing the Saturnalia of the Romans, a festival instituted in honor of Saturn, appointed a festival in honor of her Divine Master, Jesus Christ, to supersede it. But the observance of the day did not become general until about the year 500. The reason why the evening before Christmas day is celebrated, is, that in the primitive church the day was always observed as the Sabbath, and like it, preceded by an eve, or vigil. It was once believed that if we were to go into a cow-house

at twelve o'clock, on the night before Christmas, all the cattle would be found kneeling. Many firmly believe the bees sing in their hives Christmas Eve, to welcome the approaching day.

We deck our houses and churches with evergreen, because at this sacred time the earth, then wrapped in darkness, was, as it were, clothed in living green by the birth of Jesus Christ, our Saviour; fit emblems are they, of the never-dying spirit of our Lord and Master.

The laurel is used with other evergreens at Christmas, because of its use among the ancient Romans, as the emblem of peace, joy, and victory. In the Christian sense it may be applied to the victory gained over the powers of evil by the coming of Christ. The mistletoe is used in all Christmas decorations by the English. Its berries and its green are very beautiful. It is a parasitic plant, and grows on the oak tree. A branch of mistletoe is often hung over a door-way on Christmas Eve, and if a gentleman can kiss a lady as she passes under the mistletoe, he has on *that* evening a right to the privilege.

The evergreens mostly used in America are hemlock, spruce, laurel, and the varieties of ground pine. The bright red bitter sweet berries gathered in the fall add to the beauty of the wreaths.

Many have asked the meaning of initials affixed to crosses on that day, such as I. H. C., and I. H. S. The former stands for three Latin words: "Jesus Humanitatis Consolator"—Jesus the Consoler of mankind; the latter, "Jesus Hominum Salvator"—Jesus the Saviour of Men. On some very ancient crosses are found

I. N. R. I., "Jesus Nazarenus, Rex Judæorum"—Jesus of Nazareth, King of the Jews.

"Yule" was a name anciently given to Christmas, and it was the custom to select a large log to burn on Christmas Eve, for in those days the old-fashioned fireplaces would hold very large logs of wood. The festivities of that night lasted until the log burned out. This log was called the "Yule log."

The Scandinavians watched the declining rays of the sun from early spring even to December, with great anxiety, and erected slanting dolmens to detect the first certainty of its approaching return; and when informed that its face was once more turned towards their habitations, over which their enemy, the snow, had already usurped his authority, they brought the "Yule log" to the fire, and danced, and sung, and shouted, and drank, the grand carouse of all the year, making the frozen air jubilant with their Christmas carols under the mistletoe.

Our Pilgrim Fathers had suffered so much persecution from the Church of England, that they abolished all church festivities. Their persecutions made them austere in all things. They looked upon church festivals as devices of the evil spirits, forgetting that He who gave us the bright sun, lovely flowers, and sparkling streams, rejoices to see man cheerful as well as good.

Our Pilgrim Fathers suffered much for our good, and now our noble free country can afford to have many festivals.

The celebration of Christmas is fast winning its way, even in New England. The beautiful custom of decorat-

ing our homes and our churches yearly increases throughout the land. What can be more appropriate than to celebrate the birthday of our Saviour with garlands and songs, and the affectionate interchange of gifts.

God gave us his only begotten Son; we in humble imitation give gifts to our loved ones. God's deeds seem consistent with this day. He, whose birth we celebrate, gave his life for us. Can we restrain our hands from relieving, our hearts from sympathizing with the poor, the bereaved, and the distressed?

The custom of giving presents at Christmas originated in Germany. It was derived from the ancient feast of Sol. The children of many Americans, who remember Christmas, hang up their stockings Christmas Eve, thinking "Santa Claus" will come in the night and fill them with gifts. Some, to avoid being roused at too early an hour, have taken a large bag, as a receptacle for presents, and the father or mother of the family in due time distribute the presents. Others have had a table spread with their gifts of love, or place their gifts carefully under the breakfast plates, or on the chairs at the table. But the German custom of Christmas trees is by far the most desirable. We wish it was universal here. The writer of this assisted in preparing almost the first tree in our portion of New England, but since then the Christmas tree has spread far and wide; a tree more productive of pleasure and fun was never before planted.

We will give some simple directions for the arrangement of the Christmas tree, hoping to induce some families, who have felt a Christmas tree was too expensive, to plant it this year. This tree is within the means of the

poor as well as the rich, by the exercise of the united skill of any family.

We think all such festivals and family meetings assist in making "the home" the dearest spot on earth.

1.—HOW TO MAKE A CHRISTMAS TREE.

THE first thing to be considered is how to obtain a suitable tree.

If you are not near any woods, and intend to purchase an evergreen from a nursery of trees, the "silver fir" is decidedly the best adapted for that purpose. In the large cities, trees of all kinds can be easily bought; they are carried through the streets for sale. If you go to the woods, the common spruce is the most suitable. The hemlock is the prettiest green, but its boughs are not sufficiently firm to bear any considerable weight. If a spruce cannot be found, hemlock can be used by nailing narrow slats of wood across the tree and under the branches, as a support. Paint the slats green, and they do not show; in that way candles and presents can be firmly fastened to its branches.

If the tree is not perfect in shape, nail on here and there an extra branch, until it becomes symmetrical.

Take a small round tub, or half of a small cask. Place your tree in the centre and brace it firmly, and fill the cask with sand. Cover the cask with green moss; it is the prettiest green for the purpose. It can be covered with little branches of hemlock if moss cannot be procured, or even a green floor mat can be placed around it.

Another simple way to fasten a tree firmly, is to take a suitable block of wood, and have a hole made in the centre just to fit the stem of the tree, and cover the block with moss, or paint it. Then place your tree either in the centre or corner of your room where it is to be, first spreading a white cloth over the floor, which will not only protect your carpet, but add to the brilliancy of your tree when it is lighted. Some use a small tree, and place it in the centre of a table; the presents too large and heavy for the tree, are placed upon the table. When your tree is firmly placed in the right position, fasten on your candles with little tins, cut in the form of a diamond, with two very acute angles, and bent in the centre to form a right angle; push one point into your tree, and on the other fasten your candle or taper. The latter is the prettiest, and neatest to use. Buy the colored wax tapers. If you prefer you can cut up candles. Tapers or candles can be fastened also to your trees by wires, or by melting one end of the candle, and while hot, fasten it by the melted wax to the branch of the tree. Also you can purchase tins prepared to hold the tapers, made with a sharp point to fasten to the tree, and one to put in the taper; that point must be heated before fastening it to the candle. This tin has a hollow rim around it to catch the melted wax.

Trees can be lighted with gas, by unscrewing the centre gas chandelier, and fastening on a gas pipe reaching to the floor, with branches or arms of different lengths, according to the size of the tree, longer at the bottom, shorter at the top. Fasten your tree firmly close to the centre pipe; the branches of the tree should hide it.

The branches of the gas-pipe should be wound with gold or green paper, and the branches of the tree placed, if possible, over them. This makes a brilliant tree, and is much easier to light, and does not require to be constantly watched. But wax tapers are more appropriate.

When your tree is firmly fastened and the lights all arranged, hang on your ornaments with wires and ribbons, commencing with the top of the tree first.

We will give a few simple directions for making ornaments, which may be useful to those who cannot afford to purchase.

To form gilded balls, take nuts, such as walnuts, filberts, and English walnuts (the latter nut can be opened and filled with anything you please, and then glued together again). Fasten a long tack or nail into the end of the walnut to hold it by, and afterwards to suspend to the tree. Wash the nut all over with the white of an egg, laid on with a feather. Then roll it in leaf gold till it is well covered. Be careful you do not breathe over the leaf gold, or it will fly away from you. A cheaper way is to take a sheet of gold paper, and cut a piece sufficiently large to cover the nut. Brush it with paste, then fasten it round the nut, rolling it over and over in your hand, to fill in every crevice. Apples covered with gold paper look very tempting; a smooth-skinned apple, of medium size, can be used, and the gold paper should be cut in sections, so that it will fit the apple smoothly.

Pretty little ornamental bags can be made of English walnuts. After the shells are well cleaned, varnish and paint or gild them in stripes, then bore holes in each

half shell at the top and bottom, and fasten them together with narrow ribbon. Another prettier way is to take pieces of colored silk or ribbon, and fasten together at the side, then take half of one side of a nut, and glue the silk firmly all around the inside edge; hem the top of the silk and run in a string, or simply take strong saddlers' silk and run all around, to draw it up. Thus is formed a pretty bag, which can be filled with candy; lace bags, filled with candy and parched corn, are ornamental. Take oblong pieces of coarse lace, run into the meshes bright colored worsted, then fasten them into a bag firm with the same worsted, and draw them up at the top with worsted. Birds' nests add to the attraction of the tree. Take some halves of unboiled egg-shells; dip them in white of egg (but first you must have some moss ready), make a hollow of moss in your hand, and put the half shell in it. The moss will adhere to the outside. Take care that your moss be thick enough to hide the white of the shell. Line the inside with down or cotton wool, and put sugar-plum eggs in it. These nests look charming in the dark foliage of a tree. Small flags are a great addition; we would suggest that flags made to represent the national banner of other nations would be pleasant work for both boys and girls, illustrations of all of which can be found in any large atlas.

For horns of candy, get some white cartridge paper, cut squares, ornament them with pictures, mottoes, gold, silver, and fancy paper; shape them into a horn, and paste them firmly; cut off the top point and bind the rim with paper or ribbon, also paste on a loop of ribbon to fasten to the tree, and fill them with candy.

Glittering crystals, made of alum, are very pretty. To make them, dissolve alum in hot water until it will hold no more, then strain it off. Then take bonnet wire and form little baskets, sprays of leaves, little wreaths, or make the wreaths of tiny sprigs of spruce, fir, or take raisin stems (a slightly rough surface is necessary), suspend these by a network of string tied across the top of a deep basket; the dissolved alum must cover each article entirely; let them remain undisturbed over night. Remove them carefully the next morning, and you will find them glittering with minute crystals, resembling diamonds. If powdered tumeric is added to the hot alum solution, the crystals will be bright yellow. Litmus will cause them to be of a bright red. Logwood will turn them purple. The more muddy the solution the finer will be the crystals.

Sprays of mock coral, also tiny baskets of the same material, add to the tree's beauty. To make them, take bright red sealing-wax, powder it, and dissolve it in alcohol. Then take your twigs, sprays, or anything you wish to imitate coral, and dip them in the above mixture until they are well dyed.

Baskets made of moss and filled with natural flowers, add a fresh beauty to the tree. Balls made of cake, and frosted all over, look like snow balls. Pop corn balls make quite a show. Bits of cotton wool, covered with diamond powder, and scattered over the tree, imitate snow.

Take gold paper, cut it in strips a quarter of an inch wide, and an inch and a half long. Take one of the strips and fasten together with paste, forming a ring;

then take another strip and pass it through the ring just formed, and fasten it together with paste ; continue this process until you have made a long chain. A number of these chains, festooned from branch to branch, resemble chains of gold.

Fairies always please children, and are easily made. Purchase some small, jointed wooden or china dolls, and different colored tarlatans for dresses, and form the wings of white tarlatan, or of white linen banking paper. Take butterfly wings for a pattern ; sew on gold and silver spangles on dress and wings, or paste on tiny stars of gold and silver paper. Cut little strips of gold paper, and roll them up, as you do paper lamp-lighters, for the wands. Fasten them with thread or wire to the hand of the fairy. The crown of the queen can be made of gold paper, cut in strips long enough to go round the head, and cut it in points in front, and paste it round the head. Fasten wire round the waists of the fairies, leaving one long end to wind around the branches of the trees. Thus they look as if they were flying.

Many pretty things can be made from egg-shells, such as pitchers, bowls, goblets, and tiny cradles ; ornament them with gold paper and little colored pictures.

There are hundreds of little glittering toys, which can be purchased for a few pennies, such as brass beads, little looking-glasses, glass balls, gilded toys, &c., too numerous to mention ; odd bits of tin hung among the branches glitter very prettily.

Every member of a family preparing a Christmas tree, should use his or her wits to contrive little inexpensive ornaments ; even the little ones, with some instruction,

can make many pretty things, and it will add tenfold to their pleasure to feel they have assisted in ornamenting their precious tree ; only let them *think* they can do it, and most assuredly it will be done.

In making presents, every member of the family should strive to find out the wants and tastes of those to whom they intend to give presents, thinking only of giving pleasure, and not of personal gratification of their pride or love of show. The golden rule our blessed Saviour gave us should be ever uppermost in our minds. Love should be the presiding genius of every home festival.

God works upon our hearts in many and various ways. Often the simplest thing in life may awaken us to a right sense of his goodness and mercy. So in home influences, if a Christmas tree every year can add one link to the chain which binds us in love to one another, should we not be paid for weeks of labor ? Every child thus early taught thoughtfulness for others, must feel the good effects through life.

2.—THE CHRISTMAS BRAN PIE.

THE bran pie is often used in England, in place of the Christmas tree, or as an addition to the "Twelfth Night" party.

It is within the means of every family, as its contents can be inexpensive or expensive, according to the taste and means of the maker.

First, a large wooden bowl should be obtained, or any

large tin pan or dish. This can be covered with white cloth or not, as the maker pleases; a wreath of evergreens around the edge is an improvement.

The contents of the pie may be sugar hearts, rings, kisses, or any bonbons, mock rings, or gold rings, indeed, any article which can be easily tied up in a small bundle. It is desirable that there should be many articles in this pie that will cause fun and laughter. Blanks, such as an empty box, or some trifle rolled up in many papers. A bright piece of silver, called a lucky piece, or a half-six-pence, enclosed in a nut-shell, and like all the rest of the articles, tied up in paper, adds to the sport. All these bundles should be placed in the large bowl or dish and covered with bran. A large spoon can be laid on the top of the pie.

This pie should be placed on the table, after a Christmas dinner or supper, the guests or family all remaining in their seats around the table. If there are many little ones, it can be arranged beforehand, and have a servant, or some member of the family, place the pie at the front door, and ring the bell furiously and blow a trumpet; also place a paper on the top of the pie, on which is written, "A present from Santa Claus." As soon as the bell is rung, the ringer must disappear at once, as children are wide awake at Christmas. We had a bran pie brought in that way; the children rushed to the door, and in their eagerness to see Santa Claus, ran past the pie some distance, looking eagerly on all sides; when they returned, one little boy declared he saw him whisking round the corner of the street. When the pie is on the table, everybody is invited to partake. Each in turn

takes a spoonful ; whatever bundle the spoon touches is theirs ; the bundle must be opened at once and exhibited before the next person dips. The very inappropriateness of some of the gifts helps to create laughter, and there is a good deal of amusement in the after exchanging, or refusing to exchange, when the pie is all distributed.

3.—TWELFTH NIGHT.

IN England their festivities continue twelve days. Twelfth Night is sometimes called "Old Christmas," as it was the day celebrated as Christmas before the almanac was changed. The change was made by Pope Gregory XIII., during the year 1752. Therefore Twelfth Night has its own peculiar festivities. In some portions of England they have a large gathering of friends. During the evening two dishes of little frosted cakes are passed round, one for the gentlemen and one for the ladies. In each there is one cake with a ring, and one with a broken sixpence. The two who get the ring will be married before the year is out. The broken sixpence indicates an old bachelor or an old maid ; but if the two agree to join their broken sixpence, there is a chance for them. So says the old tradition.

A lady, whose early youth was spent in England, says where she lived Twelfth Night was celebrated especially by the children. At their social parties they selected a king and queen, who regulated the festivities of the evening. Sometimes the lady of the house prepared cards, with various figures written or drawn upon

them, among them a king and queen. Each child drew a card on entering, which designated the character he or she was to represent. Of course the lady managed to slip the cards of king and queen into the hands of those best able to preside.

In one of our small cities, where there are several families who unite in keeping Twelfth Night every year, they have but one ring, and whoever gets it must give the party the next year.

4.—THE CHRISTMAS BAG.

MAKE a large bag of thin white paper or silver paper, fill it with sugar plums, and tie a string around the top, to keep it fast. Then suspend it from the ceiling, or from a large door frame, and provide a long, light stick. Each little child is blindfolded in turn, and the stick put into his or her hand. She is then led within reach of the bag, and told to strike it. If she succeeds in her aim and tears a hole in it, the sugar plums are scattered on the floor, and the little ones scramble for them; but it is by no means easy to strike a suspended object blindfolded; generally many attempts are made unsuccessfully. Each child is allowed three trials. The maker of the bag can put in it tiny books, pincushions, or any little toy, with the sugar plums. This bag would add to a child's party; it is often used at birthday parties. An older person should always superintend, for some children would be greedy or rude.

Amusements for Christmas Holidays.

ADAPTED TO ALL AGES.

SHAKESPEARE reading clubs, private theatricals, charades, and tableaux are deservedly the popular home amusements of the present day. They certainly strengthen the lungs and memory, and improve the intellectual tastes. These amusements are peculiarly adapted to enliven long winter evenings. As some of our young friends may not understand the *modus operandi* of these amusements, we will try and enlighten them.

1. — SHAKESPEARE READING CLUBS.

SOME clubs read Shakespeare alone. It is most certainly a noble study, and one we can never weary of. Few can hope ever to excel in delineating Shakespeare. Therefore it is well, if we meet together for social enjoyment as well as improvement, to have a variety of plays, such as Sheridan Knowles' plays. Also, it is an admirable way of learning to converse easily in German and

French to read plays in the different languages. In reading these plays, the parts, in the beginning, should be given to different members.

The librettos of many excellent plays can be bought for a very small sum, such as "Ion," "Hunchback," "William Tell," "Love's Sacrifice," and many other excellent old plays. These small books are less cumbersome to carry around. It is well before the club meets to read any play, to have each person read over his or her part, so as to be able to comprehend the character. Therefore the play to be read at each reading should be given out at the close of every meeting, and the parts selected, each member having an equal share. Such clubs are far more agreeable to its members, and less likely to cause unpleasant rivalries, than clubs for private theatricals, as private actors are often jealous, for human nature, alas! is weak.

We have known of some very successful clubs, where discord and jealousy never appeared, and where harmony reigned. We will give the manner of proceeding adopted by one of them, as it may assist in the formation of others. The club was started by some young ladies, with a view of making home and winter evenings agreeable to their brothers. A committee was chosen to form a code of laws. Each one was to subscribe a small sum to purchase the librettos of their plays. The following rules were signed by all the members: —

1. Each member of the club must take his or her turn in choosing a play, and in giving out the rôle of characters.
2. Every member must take the characters given him,

and do his best, unless he can exchange parts with some other member, with the consent of the one who selected the play.

3. The one who selects the play has a right to the best character.

4. The club shall meet once a week at the houses of members, in alphabetical rotation.

5. Whenever any member is unable to take his part and cannot attend the meeting, he must provide some one to take his character.

6. No new member can be admitted without the vote of the majority.

7. Each member must study his or her part well, before meeting with the club. If any two, or several, should have difficult parts together, they must meet privately and practise them.

At first they merely read the plays; but soon they partially acted them, and found them increased in interest thereby. They always had their little librettos by them. Those who had ready memories rarely referred to them, or a mere glance would be sufficient. Finally they dressed in character, and admitted an audience composed of their relatives.

There is not necessarily anything awkward in having the books in hand. Such little pamphlets can be easily rolled up, and will scarcely be noticed. Under these rules they became familiar with the best plays, without wearying of them, and each member had an opportunity of consulting his own taste.

Before the winter closed the members of this club found they could so easily learn their parts, that they rarely

were obliged to refer to their librettos. Constant practice improved their memories. Often those whose parts were associated together, would meet for private practice.

2.—PRIVATE THEATRICALS.

PRIVATE THEATRICALS amuse a large circle of *friends*, and any club willing to undertake the presentation of plays deserve the thanks of their audience.

Even a simple farce requires much labor and frequent rehearsals to be well acted, and one soon wearies of the constant repetition of even witty sayings. The most trivial character must be carefully studied, for one bad actor often destroys the effect of the whole play. Then the footlights, stage, &c., must be prepared. A few directions, with a list of easy farces, may be of service. All who live in cities can easily hire scenery, dresses, &c., but for the benefit of towns and villages, we will give a short account of how such things can be managed.

Some lady can almost always be found who will give the use of her house. A house should be selected which has two parlors, connected by large folding doors or an arch; one parlor being for the audience, and the other for the stage. All the furniture and carpets should be taken from the latter room. A rough staging should be built (boards can be easily hired), and by boring a hole in the floor, a gas pipe can be run up along the front of the staging, with a sufficient number of burners. Tin shades

painted green (as they render the light softer, and more agreeable to the eye), are an addition, for they keep the light from the audience, and throw it directly on the actors. A large floor cloth can be nailed on the stage for a carpet. A drop curtain, so arranged as to be rolled up quickly and easily, by means of a cord pulley at one side of the stage, where the prompter sits, just out of sight of the audience, is necessary. Scenery for the sides and back parts of the stage can be roughly painted on cloth ; it answers every purpose of canvas, by being strained when wet, over light wooden frames (made so as to be easily moved) ; when dry, it presents a smooth, hard surface.

Each member should provide his or her own dress. To give the required expressions to the faces, a box of good water colors, some fine chalk powder, camel's hair pencils, and rouge saucers are wanted. To make frowns, scowls, or comical expressions, such as a broad grin, smirk, or simper, stand before a mirror and assume the desired expression ; then trace the wrinkles produced with a fine brush of the brown tint ; this will fix the required expression on your face. Rouge is best applied with the finger. Burnt cork is excellent for darkening eyebrows and making moustaches, also for representing leanness, which will be done by applying a faint tint just under the eyes, on the sides of the cheeks, and under the lower lip. A strong mark running from the corner of the nose down towards the corner of the mouth on each side marks age or emaciation.

A few directions may be of use in regard to the preparation of theatrical dresses. Powdered wigs can be made

of tow, ravelled yarn, or gray-colored horse hair ; beards and moustache of the same, or a piece of buffalo skin. Ermine can be made of cotton flannel, with tags of lion-skin cloth sewed on, or black tags painted. Pelisse wadding is sometimes used.

Crowns and sceptres are easily made of pasteboard and gold paper. Velvet talma cloaks, capes, or even the loose velvet sack, can be converted into cavalier cloaks (the armholes in the sack must be fastened up on the inside) by fastening them gracefully over one shoulder. Then put on a large old-fashioned lace collar, ruffles around the hand, a Kossuth hat, looped up on one side with a paste pin or buckle, fastening a white or black plume (taken from some lady's bonnet), stockings drawn over the pantaloons and fastened at the knees with bows and buckles ; and, lo ! with but little trouble, you have a fine cavalier of the olden times. With old finery and little ingenuity, a theatrical wardrobe can be quickly made, if all are willing to do their part, but the larger share of the work is generally done by a few. Rocks can be made by throwing plain gray blanket shawls over ottomans, tables, &c. Rain may be imitated by dropping peas in a tin pan ; thunder, by rattling sheet iron ; lightning by means of a tin tube, larger at one end than the other, and filled with powdered resin. The smaller end of the tube should be open, the other end so managed that the resin may sift through. Shake the tube over a lamp, or blow the resin through a plain tube into the flame of a lamp, and you will have a good imitation of lightning.

Dissolve crystals of nitrate of copper in spirits of

wine, light the solution and it will burn with a beautiful emerald green flame. Pieces of sponge, soaked in this spirit, lighted and suspended by fine wires over the stage of theatres, produce the lambent green flames now so common in incantation scenes. Strips of flannel saturated with it, and wrapped around pieces of copper, will form the swords and fire-forks brandished by the demons in such scenes. Devices like the above are very simple, and add much to the general effect.

The publishers of this book have printed a large number of small plays, adapted for private theatricals, called "The Amateur Drama." We will mention a few of them that are good; the old comedies and farces are well known to all.

DRAMAS IN TWO ACTS.

Sylvia's Soldier, . . .	3 male,	2 female characters.
Once on a Time, . . .	4 "	2 "
Down by the Sea, . . .	6 "	3 "
Bread on the Waters, . . .	5 "	3 "
The Last Loaf, . . .	5 "	3 "

DRAMAS IN ONE ACT.

Stand by the Flag, . . .	5 male characters.
The Tempter, . . .	3 " 1 female character.

FARCES.—MALE AND FEMALE CHARACTERS.

We're all Teetotallers,	4 male,	2 female characters.
A Drop too Much, . . .	4 "	2 "
Thirty Minutes for Refreshments, . . .	4 "	3 "
A Little more Cider, . . .	5 "	3 "

FARCES. — FEMALE CHARACTERS ONLY.

The greatest Plague in Life, 8 characters.

No Cure no Pay, 7 " "

The Grecian Bend, 7 " "

ALLEGORIES. — ARRANGED FOR MUSIC AND TABLEAUX.

Lightheart's Pilgrimage, 8 female characters.

The War of the Roses, 8 " " "

The Sculptor's Triumph, 1 male, 4 female characters.

3.—CHARADES.

THERE is no game that can afford so much amusement to a circle of friends as that of acting charades. It affords a scope for the exercise of both wit and ingenuity.

A word must be chosen, in which the syllables may be rendered into some kind of a lively performance, and the whole word must be capable of similar representation. Then the plan of action must be agreed upon. Old-fashioned garments, gay shawls, scarfs, old coats, hats, aprons, gowns, &c., must be looked up for the occasion, and speedily converted into various and grotesque costumes, suited to the representation to be made. By exercising a little ingenuity, very fine charades can be acted "impromptu." Speed, in all preparations, is quite necessary to success, as an audience is always impatient. If it is determined to have charades at a party, the lady of the house should arrange dresses, plan of action, and

subjects, beforehand. She can generally tell who can assist her best. If all the arrangements can be made without the knowledge of her guests, the effect will be greatly increased. This is also an improving game for a family of children. Write the plot and a simple dialogue, and let them learn it; it will be a good exercise for the memory, and teach them ease of manner; but let them only act before a home circle.

A talented friend of ours has a very pleasant way of acting charades in her own family circle, which is well adapted for large family circles, such as assemble together on Thanksgiving, and during Christmas holidays. This lady unites her family with a few other pleasant friends.

For a good charade party, twelve or more persons are desirable, and two rooms, connecting by sliding or folding doors, are the most convenient, though two connecting by only a single door will do, if the party is not a large one.

First, two persons should be chosen managers; then the managers must choose sides, so that the company will be about equally divided. The sides then take separate rooms, to become, alternately, actors and audience; the managers draw lots to see which side shall act first. Those that are to begin, first choose a word, then proceed to represent it. A common way is to divide the word into syllables, and present one at each scene, then, after having gone through the word, if the other side cannot guess it, a scene is given to represent the whole word. When all is ready for a scene, the door is thrown open for the others to look in and guess it. Frequently a whole word is given at once in one scene. The mana-

ger must always announce whether one syllable or more is given. After giving the audience time to guess it or give it up, the parties change rooms, and the other side must act ; they will, of course, have their word selected and all arrangements made, as they had sufficient time while waiting for the others.

In acting the word, each party must try to mystify the other, yet the syllable must be well represented ; but there can be by-play to divert the audience from the real word. The party that guesses the whole word the soonest, are considered the conquering party. Care must be taken not to let the actors know if the audience guess the word before it is fully acted.

Sometimes in the place of words, proverbs are acted. Each word is acted in turn, or two words are acted in one scene ; if the latter, before the scene is acted, some one of the actors can inform the audience that they will act two words of the proverb.

A few directions for acting certain words and proverbs, and a short list of words and proverbs easy to be acted, may be an assistance to our youthful readers.

If a word or syllable can be represented by action, it should be seldom spoken ; but in some cases syllables must be spoken to give an idea of the word. Some prefer acting charades entirely in pantomime.

4. — CON-JU-GATE.

Con. Arrange a school, one of the actors dressing as a country schoolmaster ; let the scholars all have books in their hands, conning their lessons in loud whispers.

Ju. The same school can be retained. One of the actors, dressed as a German Jew pedler, can come to the school to sell pens, pencils, paper, chalk, &c. He can talk in a broken Jewish manner. The *Jew* should be prominent in this scene.

Gate. This syllable, instead of the common representation of a gate, made with a small clothes-frame, &c., can be represented by having the whole company of actors dress in odd garments, and walk about the room in couples, each with a different gait, hobbling, striding, pompous, &c.

Conjugate. Let the same schoolmaster assemble his unruly school, and give out verbs to be conjugated; the scholars, to make the scene ridiculous, should mix up languages and conjugations in a medley.

5.—DUMB-FOUND.

Dumb. Let a certain number of the actors be seated in a row, when the door opens, or the curtain is drawn aside; let them remain perfectly silent for two moments, then let them silently rise and walk out of the room. Or as they sit silent, some actor can come in and ask questions to each, receiving only a vacant stare in answer; he then can rush out of the room, calling them a stupid set; it would be too plain to call them dumb.

Found. This can be made very amusing by arranging a court scene, judge, jury, and lawyers, and a prisoner's box, in which an actor, dressed as a servant-girl, can

be seated as the criminal accused of stealing a pocket-book. Witnesses can be examined. After the court has gone over the case, and the lawyers make as much sport as possible in their examination, a boy, dressed as a ragged Irish boy, should rush in, pocket-book in hand, calling on the judge to hear him. After ordering him to be turned out, and much talk being made about turning him out, at last, in a broken Irish voice, he must scream out, "Plaase yer honor, it's me that *found* it," holding aloft the pocket-book. The judge must request to see the pocket-book. (A young boy once acting this part, caused much laughter, by exclaiming, "Och, and indade is the court honest?") The judge having examined the pocket-book, declares the girl innocent, and dismisses the court.

Dumbfound. The room should be partially darkened, and some of the actors seated around the room talking as they please. One of the actors can be dressed as a ghost. A giant ghost acted by dressing up an umbrella, or a broom, arranging it with long white drapery of sheets, and the person carrying it can raise the dressed-up umbrella or broom as they enter the room. The ghost can glide slowly around the room; its occupants should exhibit silent horror, either by crouching down, contortions of the face, or in any way possible, but not a sound should be uttered.

6. — SO-RO-SIS.

So. One of the actors should be dressed as a school-mistress; some children can be seated by her with patch-

work in their hands. The mistress can teach them sewing, while in another part of the room an actor must hold some papers of seeds, and pretend to be sewing the seeds in a box or pot of earth.

Ro. Place the actors all in a row; let them stand gazing at the audience a moment, then all at the same time make a low bow to the audience, and that scene is over.

Sis. Have a school, and the master should call "sis" to come and recite; any little girl can take the part of "sis," or some boy can complain of his "sis" to the teacher.

Sorosis. Can be made very amusing by representing an assembly of strong-minded women. The gentlemen actors can dress in outlandish dresses, and act the part of women. They can choose a president, and other officers, &c.

7. — LAMENTABLE.

FRENCH CHARADE.

"L'AMONT" can be acted well in pantomime by representing an old deaf man, and his young wife; the old man with spectacles on nose, sitting in a large chair, reading the newspaper, his young wife standing behind the chair. A low tap is heard at the door. She starts and listens; the door opens slyly and discovers a young man. She starts with delight, but points to the old man, motioning the young man to go. He makes gestures of despair; then appears to have a sudden thought, bows,

and retires. Soon a loud knock is heard ; she goes to the door, and returns with a letter, giving it to the old man ; he reads, shakes his head, and hands it to her ; she looks at it, runs for his hat and coat, and motions him to go. He leaves at one door, while *L'Aman* enters at another. Then they act a lover-like scene, and the curtain drops.

Table. She again appears with sleeves rolled up, apron on, rolling-pin in hand, making cakes, the young lover standing by, and now and then eating one of the cakes. They hear a heavy step, and the lover runs for a hiding-place. At last he springs under the table, and she pulls a table cloth down around it, and goes on rolling cakes. In comes the old man, hobbling along. He looks around and suspects something, and begins a strict search. Thus ends that scene.

Lamentable. The same actors appear, but the table is turned over, and, behold ! the old man has seized the young lover, and is brandishing aloft a heavy cane, while the young wife appears, weeping bitterly.

The following words are easy to be acted : —

Back-bite.	Bond-age.	Brace-let.
Com-fort.	Ann-ounce.	In-firm.
In-fan-tile.	Sin-cere,	Spec-ta-cles.
Pa-pa-cy.	No-bil-i-ty.	Per-mu-ta-tion.
Fare-well.	Pen-i-tent.	Rail-way.
Car-pet.	Bride-well.	Trans-mute.

8.—PROVERBS.

SAFE BIND, SAFE FIND.

Safe. An actor takes the part of a distracted mother, rushes around the room exclaiming, “ My child is lost ! ” “ He must be drowned ! ” &c. Soon one of the actors can rush in with a child, exclaiming, “ Madam, your child is safe, but I found him in a little boat, floating out to sea ; ” other actors can rush in, all talking at once, some scolding the child, others rejoicing he is safe.

Bind. The one acting the part of mother can be seated with her work in her hands, and in her basket some rolls of old cotton. Three children can come in crying, one with a cut head (take some red paint, and make a splash on the forehead to represent blood), exclaiming, “ O, dear, I’m killed, I know.” The other, limping and crying, “ O, my foot is broken ! O, dear ! O, dear ! ” The other complaining of her hand, all talking at once. The mother must order them to talk one at a time, and she will bind up their wounds. Then she can take her rolls of cotton and bind up the injured parts.

Safe. The mother and children can be seated talking, when a knock comes at the door. One child opens the door and admits a pedler ; after showing some trifles, he declares he has some wonderful money safes, and exhibits some boxes, and expatiates on the virtues of his safes. The mother can purchase one for each child.

Find. The same mother can be seated as usual, when

the children must come running in, telling that one of their number has lost his safe. They all hunt for it, and look everywhere to find it, to no purpose.

Safe bind, safe find. The scene opens with a little girl tied into a chair, reading a book. The mother must come in arrayed for the street. On entering, she must exclaim, "I am thankful I have at last found a way to keep my child from being lost." Then she must turn to the audience, and ask them if they can tell her the proverb. If they cannot guess, she must ask if she shall tell them. Sometimes the audience require time to talk it over before they are willing to own they cannot guess it.

One example will sufficiently illustrate the manner proverbs are acted. We will now give a list of some proverbs adapted for action.

Ill weeds grow apace.

Little pitchers have large ears.

Fine feathers make fine birds.

Union is strength.

Time unveils truth.

Black cats have black kittens.

Necessity is the mother of invention.

All is not gold that glitters.

Slow and sure.

9.—TABLEAUX VIVANTS.

TABLEAUX VIVANTS, as commonly represented, are so well understood that no directions are necessary; but

some of our readers may not have heard of the illustration of poems, &c., by a series of living pictures. This is far more interesting than simply to personify some one picture. Still another way is to represent the different verses and scenes in a song in pantomime, while at the same time some one who is a good musician sings the verses of the song, as they are represented. For instance, "The Mistletoe Bough;" first represent a room decorated with green, a company assembled, gayly dressed and dancing, while a lady or gentleman behind the scene sings the verse represented in distinct tones, and so on through the whole song; the last scene, representing children in a lumber-room opening an old chest, and exposing a skeleton, old flowers, &c. "Auld Robin Grey," "The Three Fishers," "O, they marched through the Town," "She wore a wreath of Roses," "The Minstrel's Return from the War," are all excellent ballads to represent.

10.—TABLEAUX OF STATUARY.

THIS is a new form of tableaux, and if well done, exceedingly beautiful.

To prepare and arrange groups of statuary requires artistic skill, patience, and steady nerves; the two last qualities are necessary for those acting as statues.

A lady who excels in preparing groups of statues, as we can testify, has kindly permitted us to give to the public her manner of preparing them.

First, some effective groups of statuary must be selected, and carefully examined. Then those persons who are willing to gratify their friends by acting as statues, can be arranged in the different groups according to their fitness ; those acting as statues, require marked features, and in most groups fine figures to *build* upon, as drapery conceals minor faults. All that can be prepared before the evening, are the head gear and the articles for drapery. A cap must be made of white linen or cotton, closely fitting the head. Take candle-wicking, and knit it on common sized ivory needles, wet it in hot water, and iron it dry. Then ravel it out, and cut it into the desirable lengths, and fasten it to the cap like a wig. When placed on the head, this candle-wicking can be arranged according to the statue to be represented, and it will resemble the hair carved in marble. If expense is not to be considered, the drapery should be made of cotton flannel, as it hangs heavier, and is more easily arranged than sheets, which are generally used to save expense. From three to four sheets are often required for the drapery of one person, as it is necessary to hang in such heavy folds to look like marble. One is usually doubled up and tied around the waist, the others folded, tied, and pinned, to resemble the drapery of the statue represented ; rules are impossible to give, as the arrangement can only be made by an ingenious as well as an artistic person. Now comes the most disagreeable part, that of painting all exposed parts, such as neck, face, hands or feet, to resemble marble. First, common whiting must be mixed smoothly in water, the consistency of milk. This is put on with a shaving brush, and every

part wholly covered with this preparation ; let that nearly dry, then rub it in with the hand, then rub in lily white, to give the flesh, besides the whiteness of marble, the soft look of polished marble. The lips are finished at the last moment. Old white stocking legs drawn over the arms will save the trouble of painting them. Then the statues are ready to be grouped for exhibition. Any person who is nervous, restless, and easily inclined to laugh, cannot act as a statue. It is not possible to realize the beauty of such a group of living statuary, when well done, unless it has been once seen. We advise those attempting to get up exhibitions for the benefit of some charitable object, to try a few groups of living statuary ; it is very effective to an audience.

11.—LIGHTS AND SHADES.

If you wish to throw the background of a tableau into shadow, place screens between the lights at the sides of the stage and that part of the picture you wish to have dark ; *vice versa* with the foreground. Particular points or characters may be more brilliantly lighted than others, by placing at the side of the stage a strong light within a large box, open at one side, and lined with bright tin reflectors.

Lights of different colors can be thrown successively on a picture, and made to blend one with another, by placing the various colored fires in boxes three feet square, one at one side, and lined with reflectors. Those

arranged at the sides of the stage on pivots, can be turned on, one after another, so as to throw their light on the stage. Before one light has entirely vanished from the scene, a different color should gradually take its place.

Ventriloquism Made Easy.

VENTRILLOQUISM we always supposed, like many other arts, depended to a certain extent on natural talent, or was a peculiar gift.

Professional ventriloquists favor the idea that it is a natural gift, in order to enhance their profits. But boys of the present age are not so ready to believe in marvellous gifts, and may have persevered in trying to imitate famous ventriloquists, and to try was to succeed.

A friend of ours once met a boy only ten or eleven years old, who was an excellent ventriloquist, so far as the power of throwing the voice into a closet or adjoining room goes. On being questioned if he could explain the power he had, the boy said he had heard Harrington the ventriloquist some time previous, and having a desire to possess the same acquirement, he passed in practice in a garret all the spare time he could get for many days, and at the end of that time was fairly startled himself at hearing a voice come distinctly from an old chest of drawers.

The persevering little fellow had found out for himself the true theory.

We will give our young friends some plain and simple rules and directions how to acquire the power of ventriloquism, which we have obtained from a reliable English work ; many persons following these rules have obtained proficiency in this art, according as they devoted time and attention to the subject. The word ventriloquism is derived from *venter*, the belly, and *loquor*, I speak ; literally signifying, belly-speaking.

1.—WHAT IS VENTRILLOQUISM.

VENTRILLOQUISM may be divided into two sections, or general heads, the first of which may be appropriately designated as Polyphonism, consists of the simple imitation of the voices of human creatures, of animals, of musical instruments, and sounds and noises of every description, in which no illusion is intended, but where, on the contrary, the imitation is avowedly executed by the mimic, among which we may classify sawing, planing, door-creaking, sounds of musical instruments, and other similar imitations.

Secondly, we have ventriloquism proper, which consists in the imitation of such voices, sounds, and noises, not as originally in him, but in some other appropriate source, at a given or varying distance, in any, or even in several directions, either singly or together, a process exciting both wonder and amusement, and which may be accomplished by thousands who have hitherto viewed the

ventriloquist as invested with a power wholly denied by nature to themselves.

Polyphony is very common, for there is scarcely a public school which does not possess at least one boy capable of imitating the mewing of a cat, the barking of a dog, or the squeaking voice of an old woman. It is very seldom that even a blundering attempt at ventriloquism is heard, except from a public platform, simply from the want of knowledge of how to proceed. The art does not depend on a particular structure or organization of these parts, but may be acquired by almost any one ardently desirous of attaining it, and determined to persevere in repeated trials.

If a man, though in the same room with another, can, by any peculiar modifications of the organs of speech, produce a sound, which, in faintness, tone, body, and every other sensible quality, perfectly resembles a sound delivered from the roof of an opposite house, the ear will naturally, without examination, refer it to that situation and distance; the sound which he hears being only a sign, which from infancy he has been accustomed by experience to associate with the idea of a person speaking from the house-top. A deception of this kind is practised with success on the organ and other musical instruments.

The English Cyclopædia says “the *essence* of ventriloquy consists in creating illusions as to the distance and direction whence a sound has travelled.” How these sounds are produced, we will now show.

2.—THE THEORY OF VENTRiloquism.

MANY physiologists aver that ventriloquism is produced by speaking during the inspiration of air. It is quite possible to articulate under these circumstances, and the plan may be occasionally adopted; but the practical experience of many performers prove that the general current of utterance is, as in ordinary speech, during *expiration* of the breath.

Some think ventriloquism comprises a management of the echoes; but echo only repeats what has been already spoken. Baron Mingon, a famous ventriloquist, had an automaton doll with which he could apparently converse. He thus describes his *modus operandi*: “*I press my tongue against the teeth, and thus circumscribe a cavity between my left cheek and teeth, in which the voice is produced by the air held in reserve in the pharynx.*” The sounds thus receive a hollow and muffled tone, which causes them to appear to come from a distance.” The Baron says, “It is essential to have the breath well under control, and not to respire more than can be avoided.” Ventriloquists often experience fatigue in the chest, and have attributed it to the slow expiration of the breath. Some are often compelled to cough during the progress of excitation.

To attain an exact and positive knowledge of the modifications of voice specified as ventriloquism, it is important to be familiar with the distinctions of the sounds uttered by the mouth; and to ascertain how the organs act in producing those vocal modifications, it is

necessary to know how the breath is vocalized in all its distinctions of pitch, loudness, and quality, by the ordinary actions of the vocal organs. In ordinary language we speak of noise, of common sound, and of musical sounds. A quill striking a piece of wood causes a noise, but striking successively against the teeth of a wheel, or of a comb, a continued sound, and if the teeth of the wheel are at equal distances, and the velocity of the rotation is constant, a musical sound.

Phonation, or the production of voice, is a result of actions taking place under two distinct classes of laws, namely : the ordinary mechanical laws of acoustics, and the physiological laws of muscular movement. The adjustment of the vocal mechanism to be brought into operation by the current of air, is made by actions, under the latter laws ; and phonation is the result of the reaction of the mechanism on the current of air by mechanical movements under the former laws. Now the pitch of the voice essentially depends on the tension of the vocal ligaments ; the loudness on the extent of the excursion of these ligaments in their vibrations ; the duration on the continuance of the vocalizing causes ; the equality on the organization of the larynx, and also on the form and size of the vocal tube. The form and size of this tube can be altered in various ways. For instance, by dilating or contracting the mouth ; by contracting the communication between the pharynx and mouth, so as to constitute them distinct chambers, or by dilating the opening so as to throw them into one, which is chiefly attained by movements of the soft palate, and by altering the form of the mouth's cavity, which is

effected by varying the position of the tongue. Each of these modifications of the vocal tube conveys a peculiarity of quality to the voice, all, however, being local or laryngeal sounds. Moreover, sounds can be produced in the vocal tube, apart from the larynx. These, strictly speaking, are not vocal sounds, though some of them may be of a definite and uniform pitch, while others are mere noises, as rattling, whispering, gurgling, whistling, snoring, and the like. Now, as everything audible comes under the classes of noise, sound, or musical sound, and as each variety originates in the vocal apparatus of man, it is obvious that *an ordinary vocal apparatus is all that is required* for the achievement of the feats of ventriloquy.

A person in a house cannot judge by the noise of an approaching carriage, with any certainty, whether it is coming from the right or left. Thus it is in many other sounds. *But we judge the direction sound has travelled from its source on reaching the ear.* The ventriloquist indicates, either directly or indirectly, the direction from which he wishes his audience to believe the sound is coming. Thus he directly indicates it by words, such as, "Are you up there?" "He is up the chimney," "He is in the cellar," "Are you down there?" &c. He indirectly indicates it by some suggestive circumstance, as an action or gesture, which is so skilfully unobtrusive and natural as to effect its object without being discovered. Thus, when the ventriloquist looks or listens in any direction, or even simply turns towards any point, as if he expected sound to come thence, *the attention of an audience is by that means instantly directed*

to the same place. Thus, before a sound is produced, the audience expect it to come in the suggested direction, and the ventriloquist has merely by his *adjustment of vocal loudness*, to indicate the necessary distance, when a *misjudgment of the audience will complete the illusion which he has begun.*"

The effect which is produced on sound by its travelling from a distance, is observed to be, —

1. That its loudness is reduced in proportion to its distance.
2. That its pitch remains unaltered.
3. That its quality or tone is somewhat altered.
4. That its duration remains unaltered.
5. That the human speech is *somewhat obscured*, chiefly in the consonant sounds.

It must be remembered that the ventriloquist makes the sound, not as it is heard at its source, *but as it is heard after travelling from a distance.*

Too much attention cannot be bestowed on the *study of sound as it falls on the ear*, and an endeavor to imitate it as it is heard, *for the secret of the art is, that as perspective is to the eye, so is ventriloquism to the ear.* When we look at a painting of a landscape, some of the objects appear at a distance, but we know that it is only the skill of the artist which has made it appear as the eye has seen it in reality. In exactly the same manner a ventriloquist acts upon and deceives the ear, by *producing sounds as they are heard from any known distances.*

We have given the acoustical theory of the effect on the auric nerve, and the means are the organs of respiration and sound with the adjoining muscles. The organs

and muscles used are the diaphragm, the lungs, the trachea, the larynx, the pharynx, and the mouth.

3.—PRACTICAL RULES AND ILLUSTRATIONS.

THE first voice a student of ventriloquism will strive to acquire is what is called "The voice in the closet." To acquire this voice, which we so name for distinction's sake, speak any word or sentence in your own natural tones; then open the mouth, and *fix the jaws* fast, as though you were trying to hinder any one from opening them farther, or shutting them; draw the tongue back in a ball; speak the same words, and the sound, instead of being formed in the mouth, will be formed in the pharynx. Great attention must be paid to holding the jaws rigid. The sound will then be found to imitate a voice heard from the other side of a door when it is closed, or under a floor, or through a wall. To ventriloquize with this voice, let the operator stand with his back to the audience, against a door. Give a gentle tap at the door, and call aloud in the natural voice, inquiring, "Who is there?" This will have the effect of drawing the attention of the audience to a person supposed to be outside. Then fix the jaw as described, and utter in the "closet voice" any words you please, such as, "I want to come in." Ask questions in the natural voice, and answer in the other. When you have done this, open the door a little, and hold a conversation with the imaginary person. As the door is now open, it is obvious that

the voice must be altered, for a voice will not sound to the ear when a door is open the same as when closed. Therefore the voice must be made to *appear* face to face, or close to the ventriloquist. To do this, the voice must not be altered from the *original note or pitch*, but be made in another part of the mouth. This is done by closing the lips tight and drawing one corner of the mouth downwards, or towards the ear. Then let the lips open at that corner only, the other part to remain closed. Next, breathe, as it were, the words out of the orifice formed.

Do not speak distinctly, but expel the breath in short puffs at each word, and as loud as possible. By so doing you will *cause the illusion* in the mind of the listeners that they hear the same voice which they heard when the door was closed, but which is now heard more distinctly and nearer on account of the door being open. This voice must always be used when the ventriloquist wishes it to appear that the sound comes through an obstacle, but from some one close at hand.

The description of voice and dialogue may be varied, as in the following example: —

“The Suffocated Victim.” This was a favorite illustration of Mr. Love, the Polyphonist.

A large box or closed cupboard is used indiscriminately; as it may be handy. The student will rap or kick the box, apparently by accident.

The voice will then utter a hoarse and subdued groan, apparently from the box or closet.

Student. (Pointing to the box with an air of astonishment.) What was that?

Voice. O, let me out !

Student. Why ! there is some one in here, I declare (to box). Who is it ?

Voice. I won't do so any more. I am nearly dead.

Student. Who are you ? How came you there ?

Voice. You know very well who I am. Let me out !
Let me out !

Student. I tell you I don't know you.

Voice. O, yes, you do.

Student. Tell me quick. Who are you ?

Voice. You're old school-fellow, Tom — ; you know me.

Student. Why, he's in Canada.

Voice. (Sharply.) You know better ; he's here ; but be quick.

Student. (Opening the lid.) Perhaps he's come by the underground railroad. Hallo !

Voice. (Not so muffled as described in direction.) Now, then, give us a hand.

Student. (Closing the lid or door sharply.) No, I won't.

Voice. (As before.) Have pity (Dick, or Mr. — , as the case may be), or I shall be choked.

Student. I believe you are a humbug.

Voice. Why don't you let me out and see, before I am dead ?

Student. (Opening and shutting the lid or door, and saying, the voice accordingly.) Dead ! not you. When did you leave Canada ?

Voice. Last week. O, I am choking !

Student. Shall I let him out ? (Opening the door.) There is no one here.

Conversations can be held with pedlers at the door, or with some one in the cellar or basement; and as a rule the lower notes of the voice will be best for voices in the basement, and formed as low in the chest as possible.

The second kind of voice, or voice No. 2, we will call it, is more easy to be acquired. It is the voice by which all ventriloquists make a supposed person speak from a long distance, or from or through the ceiling. In the first place, with your back to the audience, *direct their attention to the ceiling, by pointing to it, or by looking intently at it.* Call loudly, and ask some questions, as though believed a person to be concealed there. Make your own voice very distinct, and as near the lips as possible, as that will help the illusion. Then, in *exactly the same tone and pitch, answer; but, in order that the voice may seem to proceed from the point indicated, the words must be formed at the back part of the roof of the mouth.* To do this, the lower jaw must be drawn back and held there, the mouth open, *which will cause the palate to be elevated and drawn nearer to the pharynx,* and the sound will be reflected in that cavity, and appear to come from the roof. Too much attention cannot be paid to the manner in which the breath is used in this voice. When speaking to the supposed person, expel the words with a deep, quick breath.

When answering in the imitative voice, the breath must be *held back, and expelled very slowly, and the voice will come in a subdued and muffled manner,* little above a whisper, but so as to be well distinguished. To cause the supposed voice to come nearer by degrees, call loudly, and say, "I want you down here!" or words to that

effect; at the same time make a motion downwards with your hands. Hold some conversation with the voice, and cause it to say, "I am coming," or "Here I am," each time indicating the descent with the hand.

Let the voice, at every supposed step, roll, as it were, by degrees, *from the pharynx more into the cavity of the mouth*, and at each supposed step *contracting the opening of the mouth*, until the lips are drawn up as if you were whistling. By so doing, the cavity of the mouth will be very much enlarged. This will cause the voice to be obscured, and so to appear to come nearer by degrees. At the same time care must be taken not to articulate the consonant sounds plainly, as that would cause the disarrangement of the lips and cavity of the mouth; and in all *imitation voices* the consonants must scarcely be articulated at all, especially if the ventriloquist faces the audience. For example, suppose the imitative voice is made to say, "Mind what you are doing, you bad boy," it must be spoken as if it were written, "ind ot you're doing, you 'ad whoy." (It is rarely a ventriloquist shows a full face to his audience, unless at a great distance from them. It would help to destroy the illusion if the jaws were seen to move.) This kind of articulation is made by forming the words in the pharynx, and then sending them out of the mouth by sudden expulsions of the breath clean from the lungs at every word. This is often illustrated by a ventriloquist pretending to talk to a man on the roof.

4.—POLYPHONIC IMITATIONS.

MR. LOVE, the great polyphnoist, delighted in his youth to imitate the buzzing of insects and the cries of animals. Such accomplishments are easily acquired, and we think if our young boy friends will follow our directions, they will acquire at least polyphonic powers to amuse their friends at home and abroad.

To imitate a “tormenting bee,” a boy must use considerable pressure on his chest, as if he was about to groan suddenly, but instead of which the sound must be confined and prolonged in the throat; the greater the pressure, the higher will be the faint note produced, and which will perfectly resemble the buzzing of the bee or wasp. In all imitations of insect noises, the bee should be heard to hum gently at first, so as in a private party not to attract attention till the right pitch is obtained. The sound will penetrate every corner of a large room. To assist the illusion, the person imitating a bee should pretend to try to catch the insect. To imitate the buzzing of a blue-bottle fly, it will be necessary for the sound to be made with the lips instead of the throat: this is done by closing the lips very tight, except at one corner, where a small aperture is left; fill that cheek full of wind, but not the other, then slowly blow or force the wind contained in the cheek out of the aperture; if this is done properly, it will cause a sound exactly like the buzzing of a blue-bottle fly.

To make the above perfectly effective, the person imitating a fly or bee, should turn his face to the wall;

with a handkerchief strike at the pretended bee or fly, at the same time pretend to follow his victim, first this way and then that, and finally to "dab" his pocket handkerchief on the wall, as though he had killed it; the sound should be at times suddenly louder and then softer, which will make it appear as it is heard in different parts of the room.

"The Spectre Carpenter." The noise caused by planing and sawing wood we often hear imitated. Yet but few boys know how easily it is done. Much amusement is often caused by this imitation. To imitate planing, a boy must stand at a table a little distance from the audience, and appear to take hold of a plane and push it forward; the sound, as of a plane, is made as though you were dwelling on the last part of the word *hash*. Dwell upon the *sh* a little, *tsh*, and then clip it short by causing the tongue to close with the palate, then over again. Letters will not carry the peculiar sound of sawing; but any bright boy, by carefully listening to the sound made by carpenters, with these suggestions, can, with practice, imitate the sound perfectly. To make the deception more perfect, put some shavings in your pocket to sprinkle as you pretend to saw, also a piece of wood to fall when the sawing is ended. A friend of ours told us of a negro, well known as a famous whistler about the streets of Boston years ago, who would place both hands tightly over his ears, incline his head downwards, and imitate with great precision a music-box; but he said it pained him to do this.

5.—TO IMITATE AN ECHO.

It is impossible for a ventriloquist to produce an echo in a room of ordinary size, as the walls, being so near, would cause the sounds to be blended, and would only produce one impression on the ear; and yet a skilful ventriloquist can with ease imitate, in a room, a mountain echo. We will give the instructions, as it is very amusing.

Turn your back to the listeners; whistle loud several short, quick notes, just as if you were whistling to a dog; then as quick as possible, after the last note, and as softly and subdued as possible to be heard, whistle about a third the number of notes, but it must be in the *same note or pitch*; this will cause the last whistle to appear just like an echo at a great distance. This imitation, if well done, causes much surprise to those listening. The same thing can be done by shouting any sentence, such as, "Halloa, you, there!" or, "Ship, ahoy!" Let your voice be formed close to the lips; then quickly, and in the *same pitch or note*, speak the same words very subdued, and formed at the back of the mouth. This is very simple, yet effective.

6.—CONCLUDING REMARKS.

"ANY person acquainted with the voices before described, may imitate many others by *contraction and expansion of the glottis, and by modifications of the cavity*

of the pharynx and mouth. The best way to practise is in a room alone, to talk aloud, and, while so doing, to make all sorts of *contortions with the muscles of the mouth and jaws, first fixing the jaws in the manner already described, then drawing the lips inward, next putting them forward, at the same time placing the tongue in different shapes and positions in the mouth;* also by speaking in the natural voice, and answering in the *falsetto pitch,* which is the imitating voice for women and children.”

The ordinary compass of a voice is about twelve notes, and a very good practice to the attainment of the art is to call aloud in a certain note, *and then in the octave to that note;* do this several times a day, changing the note or pitch, loud at first, and by degrees decrease the sounds; this kind of practice will assist any one in learning to modulate the voice to appear to recede or come near by degrees.

We think enough has been said to enable *any boy,* sufficiently persevering, to become a good ventriloquist. “Always remember, that to *render a voice perspective,* the most essential thing is to attend to the study of sound as it falls upon an ear; then imitate that sound by the different contractions and expansions of the muscles of the throat, mouth, face, and jaws. During these various contractions and expansions, draw in a long breath, and talk, first rapidly, then slowly, but always with a *slow expiration of breath.* Do this a dozen times consecutively for several days, at the same time *elevate and depress the roof of the mouth,* especially the back part, as this movement causes the voice to appear near or at a distance.”

We have now given our young friends the best practical directions we could obtain from the rules given by a skilful ventriloquist. All boys who have faithfully followed our directions, should try their powers before some friend. We think they will be astonished at their success, and will be pleased to become a source of great amusement to their friends as well as themselves. But beware, boys, of *misusing* your power; always remember the "golden rule," and never frighten any person seriously.

Ventriloquism was well known, even before Christ; but it was used only as a means to foster superstition, and often took the form of divination. The statue of Memnon will instantly suggest itself as a familiar example. The gigantic head was heard to speak the moment the sun's rays glanced on its features. Undoubtedly the magic words were pronounced by the attendant priest, who must have been a ventriloquist. We could give innumerable instances of its use among the ancients; but we will close with an amusing anecdote we once heard of a famous ventriloquist. He was passing through a street with a friend, at the same time a load of hay was passing along. The ventriloquist called the attention of his friend and others passing along to the suffocating cries of a man in the centre of the hay. A crowd gathered round and stopped the astonished carter, and demanded why he was carrying a fellow-creature in his hay. The complaints and cries of the suffocated man now became fainter, and he appeared to be dying. The crowd, instantly proceeded to unload the hay into the

street, the smothered voice urging them to make haste. The feelings of the people may be imagined, when the cart was found empty. The ventriloquist and his friend walked off, laughing at the unexpected result of their trick.

Natural Magic.

THE ÆOLIAN HARP consists of an oblong box of thin deal board, about five or six inches deep, with a circle drawn in the middle of the upper side, an inch and a half in diameter, around which are to be drilled small holes. Along the upper side of the box seven, ten, or more small strings, of very fine gut, are stretched over bridges near each end, like the bridges of a violin, and tightened or relaxed with screw pins. The strings must be tuned to one and the same note, and the instrument placed in some current of air where the wind can pass over its strings with freedom. A window, the width of which is exactly equal to the length of the harp, with the sash just raised to give the air admission, is a good situation. When the wind blows upon the strings, with various degrees of force, different musical tones will be sounded; sometimes the blast brings out all the tones in full concert, and sometimes it sinks them to the softest murmur. In many old castles these harps were fastened in the windows, and their wild music caused the ignorant to think they were haunted.

A colossal imitation of the instrument just described was invented at Milan, in 1786, by Abbate Gattoni. He stretched seven strong iron wires, tuned to the notes of the gamut, from the top of a tower sixty feet high, to the house of a Signor Muscate, who was interested in the success of the experiment and this apparatus, called the giant's harp, in blowing weather, yielded lengthened peals of harmonious music. In a storm this music was sometimes heard at the distance of several miles.

Simply tying waxed saddler's silk to little sticks, and pushing them into the crevices of windows, so as to receive a draught of wind (the silk being strained tight), will produce very sweet sounds.

1.—THE MAGIC OF ACOUSTICS.

THE science of acoustics furnished the ancient sorcerers with some of their most complete deceptions. The imitation of thunder in their subterranean temples did not fail to indicate the presence of a supernatural agent. The golden virgins, whose ravishing voices resounded through the temple of Delphos; the stone from the river Pactolus, where trumpet notes scared the robber from the treasure which it guarded; the speaking head, which uttered its oracular responses at Lesbos; and the vocal statue of Memnon, which began at the break of day to accost the rising sun, were all deceptions derived from science, and from a diligent observation of the phenomena of nature.

2. — TO SHOW HOW SOUND TRAVELS THROUGH A SOLID.

TAKE a long piece of wood, such as the handle of a broom, place a watch at one end, apply your ear to the other, and the ticking will be distinctly heard.

3. — THEORY OF THE VOICE.

PROVIDE a species of whistle common as a child's toy, or a sportsman's call, in the form of a hollow cylinder, about three fourths of an inch in diameter, closed at both ends by flat circular plates with holes in their centres. Hold this toy between the teeth and the lips ; blow through it, and you can produce sounds, varying in pitch with the force with which you blow. If the air be cautiously graduated, all the sounds within the compass of a double octave may be produced from it, and if great precaution be taken in the management of the breath even deeper tones may be brought out. This simple instrument or toy, has indeed the greatest resemblance to the larynx, which is the organ of the voice.

4. — A SINGULAR EXAMPLE OF SUPERSTI- TION.

THE following *true story* was related to me by one who was personally acquainted with the facts. There was a certain bend in one of our western rivers which was

avoided by every one, as it was supposed to be haunted by the devil. At a certain hour in the evening, for many years, terrible curses were distinctly heard. Suddenly they ceased. A gentleman skilled in the science of acoustics, hearing an account of the strange phenomena, determined to ascertain the cause, and carefully examined the river on each side for about a mile above and below the bend. He ascertained that at about the time the sounds ceased, an old fisherman, who had lived on the opposite side of the river, full a mile from the spot where the curses were heard, had died. He was told that the fisherman was in the habit of crossing the river to a village, where he found a market for his fish, and where he spent his money for liquor; and that after drinking freely on his way home, while rowing across the river at night, he would swear terribly. This gentleman then persuaded a friend to go down the river to the place where the curses were formerly heard, while he remained in a boat on the river at the point at which the old man usually crossed. He then played on a bugle and sang several songs. His friend soon returned, and with eager delight exclaimed, "O, —, such glorious music fills the air, just where the curses used to be heard!" The neighbors came rushing down to hear it, and some fell on their knees, praying. They said, "the angels have driven the devil away." Mr. — then asked what were the songs they heard. His friend described them correctly, and said he understood even the words, one of them being the famous Marseillaise, another a German song; the foreign words made the ignorant more sure that the sounds were supernatural. Mr. — then played

on the bugle, and sang again the same songs, while his friend stood by ; but his friend said the music was not equal to that he had heard below, where the sounds had really seemed heavenly.

The peculiar configuration of the river banks had concentrated the sounds, and the distance and the water had softened them.

The person who related this anecdote to me said that he and his friend had often tried the experiment. Nothing would convince the more ignorant neighbors that the sounds were occasioned by merely natural causes. A love of the supernatural is strong within us, and sometimes leads us into grave mistakes.

Gardening, Flowers.

WE, as a nation, are not a happy, home-loving people. The "spirit of unrest" pervades all classes.

This enterprising, uneasy spirit, has been, and is of benefit to us, as a comparatively new country, in settling and breaking our wild western lands.

But the time has come when it is well to curb that spirit, and cultivate all quiet, home-loving influences.

Therefore we beseech you, parents, to begin in earliest infancy to cultivate a love of the beautiful in nature; give your little ones flowers; and as soon as they are able to play in the garden, give them a little spot of their own to dig in; and when they can understand the process, give them seeds to plant, and some few flowers to cultivate. We can tell you of a happy cottage home, where the children, from earliest infancy, have lived among flowers. Each had their tiny garden, with spade, hoe, trowel, and watering-pot. The father and mother would also assist with their own hands in training vines, roses, and shrubs, in artistic beauty. The good father never went to his counting-room without some flowers in

his hand, or in the button-hole of his coat, the valued gift from the tiny garden of one of his darlings. Years passed and fortune favored them, but they never would exchange their cottage home, with its vines, trees, and shrubs, for all the stately mansions in the town. And as the daughters married, and the sons left to seek their fortunes, they would look back with intense longing to their loved home ; and joyous were their meetings around the home Christmas tree.

On Sundays they always, even in midwinter, ornamented their social table with flowers, for they are God's smiles. Therefore, my friends, we speak from observation, and from seeing the effect of an opposite course. If you wish to lessen your doctor's bill, and give the beauty of robust health and happiness to your children, girls or boys, give them a garden, and let them plant, weed, and water it. If your children bring you even a simple field daisy, express your pleasure to them, and let them not see you cast it aside.

A well cared for garden displays — and displays to good advantage too — the love of home, domestic taste, a wish to please, industry, neatness, taste, and all the sweet household virtues that create a *happy* home.

Horticulture confines itself to no rank, and it may form the amusement or the pursuit alike of great and small, rich and poor; only the kind of garden we choose, and what we do with it, must depend on our circumstances.

Teach your boys the use of a pruning-knife, and how to graft ; then give them some trees to experiment upon. You may save them from dissipation, by giving them a

taste for horticulture. It is a happy, health-giving employment.

Decorate even your barn with graceful vines. The poorest house can be made an agreeable place by transplanting a few of the many simple wild vines. It is not natural to love intensely a stiff, ungainly object.

We have often thought, as we have roamed about the farming districts of New England, and have seen the many great, stiff, square houses, with not a graceful tree or flower to relieve their nakedness (though now and then a syringa, or lilac bush, or cinnamon rose, and perhaps a stately old butternut, may be seen), the sons and daughters of those households will surely emigrate. Utility is our hobby. Some farmers think it waste time to plant a flower, as it yields no fruit.

Remember the old saying, "All work and no play makes Jack a dull boy." You that dwell in a city, strive to have a small spot in the country to which you may send your children in summer, to roam at will. We heard a little child, in urging her mother to go into the country in vain, cry out, "It is too, *too bad*, mamma. We know God did not make the city for little children, because he loves us."

Do not waste your money at fashionable watering-places. Even in early years, take your children to the woods and let them see nature in its wild state. There is nothing like a day in the woods for refreshing us all, in body and mind. The wild music of running brooks is so lulling, the birds carol their "native wood-notes wild" so sweetly, the strange blended odor of the damp mould, the leaves, the wild flowers, and the prospect of

the distant meadow, are so delightful ; the play of the sunlight through the dense foliage, and on the sylvan walks, is so beautiful, and the quiet is so marked, after the hum and roar of a city, that the mind is tranquillized, and both you and your children will be nearer to God, and nearer to one another, for every hour thus spent. Our whole country is full of wild beauty. Spend your spare money in decorating your homes with trees, flowers, and shrubs. The influence upon your children will be far more beneficial.

If your children wish for money to purchase seeds and flowers for their gardens, if possible, give it cheerfully. It is far better so spent, than in dress and toys. Let them plan their own gardens, and experiment as much as they please. A very pretty fence can be made round such gardens by a number of stakes of equal lengths, pointed at one end to drive into the ground, square at the top, and painted green. Then place them at equal distances around your garden, and bore holes about six or seven inches apart for the twine, which should be brown linen. Pass the twine through the holes, in lines all around the garden. Plant vines which run rapidly, such as Cypress Vine, Maderia Vine, Nasturtium, Maurandya, Barclay-anna, Dwarf Convolvulus, Mountain Fringe, &c. By midsummer your simple fence will be very beautiful.

Having spent many years in cultivating flowers, perhaps a few practical directions from our own experience may be of service to our readers. And we will give some excellent suggestions taken from a famous florist.

1.—HOW TO PLANT SEEDS.

WE often think, because the seed we plant does not germinate, that we have purchased poor seed, when the fault is in the manner of planting.

Nearly all kinds of flower seeds require transplanting, therefore it is best to plant in boxes, pots, or hot-beds. Old cigar boxes are convenient, and are easily handled, but first bore holes in the bottom of the boxes, and in your pots or boxes place either broken clam or oyster shells, or pieces of old flower pots, as a drainage ; then take light, rich earth and sift it or rub it carefully in your hands, to be sure there are no lumps ; some bake the earth to destroy any insects which may be in it, but it answers the same purpose to pour boiling water upon it. After you have filled your boxes or pots with this prepared earth, sprinkle your seed carefully over it, and sift over them light soil sufficient to cover them, moisten them with warm water, and place the box where there is but little light, and throw a piece of paper over the top. Some use a piece of thick flannel ; if you use flannel, water your seeds without removing it, until your seeds have sprouted. A warm place will start them best. Let them remain thus several days, till the seeds have a chance to swell, before you give them much light, and keep the earth moist (a sponge is excellent to water them, as it does not disturb the position of the seeds ; also use warm water) ; as soon as you see they are sprouting, give them light, and air, if not too cold, or else the plant will not have strength to grow well. Hot-beds are the

best, and can be made with but little expense, by taking some old box ; and if you do not possess an old window-sash, you can purchase one of some builder for a trifling sum of money, and fit it to your box by nailing strips at the sides ; dig a place the size of the box, and two or three feet deep ; fill it with horse manure, mixed with straw, which is the most heating ; then sprinkle soil over the top about six inches deep ; place your box on the top, carefully heaping the earth around the outside, and your hot-bed is made, in which you can start your seeds and slips by either placing your boxes or pots in the earth on top of the manure, and plant your seeds and slips in them, or as many prefer, planting in the soil of your hot-bed. After your seedling plants are of sufficient size to transplant, if you first transplant them into small pots, you can easily plant them in your flower beds without disturbing the roots, and the plants will not require covering ; you must first dig a hole and pour water into it, then carefully slip the plant, dirt and all, from the pots, and place into the hole made for it, and press the earth tight around it. Of course they must remain in the pot till they are well rooted. In raising slips, you need to mix in full half common scouring sand with the soil, and they must be shaded from the light several days.

All who care for flowers will desire to raise verbenas, as they blossom all summer. If you wish to raise them from seed, they should be sown in February or first of March. One secret in raising fine verbenas is change of soil. It would be better to plant them every year in a different location, but if you renew the soil it will do to plant them twice in the same bed, but never three years

in succession. Indeed, flowers as well as vegetables need constant change of soil; they soon exhaust the earth. Seeds are better than are raised in locations distant from the place where they are to be sown. Flowers soon deteriorate if you continue to plant over and over from seed raised in the same spot; that is one of the reasons why seeds from Europe are generally preferred by florists. Japan Pink seed should be planted in March, in order to have them flower the first year; they are hardy and blossom also the second year. Pansy seed should be planted as early as Verbenas. Ten Weeks' Stock, Phlox Drummondi, Double Zinnias, Lobelia, Petunias, Portulaca, Salpiglossis, Candytuft, Larkspur, &c., should be planted in April. If you desire to raise Picotee or Carnation Pinks for the next year, and Canterbury Bells and Fox Gloves, sow in April. Sow Asters of all kinds the last of April or first of May. Some of the climbers, such as Maurandya Barclayanna, *Tropæolum*, commonly called Nasturtium, Cypress Vine, *Thunbergia*, &c., need transplanting, and better be sown early. Sweet Peas should be sown in the open soil about three inches deep, early in April. It is better to soak the seed in warm water before sowing. When they have germinated, and as they begin to climb, fill in earth around them, and water now and then thoroughly with soap suds. Mignonnette should not be transplanted; sow the seed in the open soil the first of May. Candytuft and Sweet Alyssum are hardy, and the seed can be sown out of doors; but if you have once had them, they will come up self-sown. Look over your beds in spring, and take up such plants, when you have the soil prepared and beds made,

then you can plant them back again where you desire. Joseph's Coat is a very brilliant plant ; its leaves are all shades of green, red, and yellow ; the seed can be sown either in or out of doors by the first of May, also Golden Calliopsis. Balsams will grow better if the seeds are not planted till the second week in May, out of doors.

All the flowers we have mentioned are desirable, even in a small garden ; of course there are hundreds of varieties of even annuals, but unless you have a gardener it is impossible to raise them all, for it is desirable, even in a small garden, to have some flowers raised by slips, or bought from some green-house, such as Fuchsias, Double Feverfew, Scarlet Geraniums, Bouvardias, Heliotropes, Rose Geraniums, Lemon Verbenas, Monthly Roses, Hardy Perpetuals, &c. Hardy Perpetual Roses are desirable in every garden, they grow so thrifty and blossom all summer, and with a little covering will live out all winter, and if they are showered often, early in the spring, while the dew is on the roses, with whale-oil soap suds, using a syringe to shower them, it will prevent the usual damage done by the slug. If you have a shady, moist place in your garden, there you can plant your Lily of the Valley, Double Blue English Violet, Forget-me-not, and Pansy.

Fuchsias also require some shade. Heliotropes and Geraniums will bear enriching more than most plants ; frequent waterings with guano water are excellent. A table-spoonful of guano to a gallon of water is sufficiently strong. It also improves Pansies, Fuchsias, and nearly all plants except Roses. Soap suds is better for Roses and Verbenas, at least according to our expe-

fience. Nearly all plants make a finer show in a garden arranged either in beds, each variety by itself, or in clusters. Before planting your garden in spring, it is well to carefully consider the nature of each flower, and arrange your garden so that each flower can be displayed to advantage ; never plant promiscuously ; it is astonishing what a difference landscape gardening will make in the general aspect of even a small place. It is quite as desirable as to arrange the colors in a picture to harmonize. Even an old stump of a tree can be made beautiful by planting vines around it, or by scooping out the top and filling in soil, and planting Nierembergia, Lobelia, Double Nasturtium, Variegated Myrtle, &c., in it. Those we have mentioned blossom all summer, except the Myrtle, the leaves of which are as beautiful as many flowers.

If we ladies would spend less time on our dress and in arrangements for the table, and take that time for working in our gardens with our children, we should not only make our homes more attractive, but we should gain in health and strength. Early every spring call a family council to decide the arrangement of your flower garden. Let your boys have a place to raise vegetables as a pastime. Encourage them to diligence by promising to purchase all they will raise ; in that way they can earn money to give to the poor, or for their Christmas presents ; even children will take far more pleasure in giving what they have really earned with their own hands.

2.—THE QUEEN OF FLOWERS, THE ROSE.

THIS beautiful flower deserves especial attention, and is truly called the Poet's flower. A rose is the type of beauty in women. A lovely maiden is called a rose-bud. A beautiful matron compared to a rose in full bloom. Its delicate and refreshing perfume is always welcome to an invalid. It adorns a bride, and is a tribute of love in decorating the lifeless remains of our loved ones.

Volumes could be written upon the beauties of the rose. A child can cultivate this beautiful flower. If you do not possess any ground, there always will be room for at least one pot with a rose in your own room.

Roses can be classified under three general heads.

No. 1.

Those that bloom only once in a season, such as Hybrid China, Provence, Sweet and Austrian Briars, most of the mosses, and all climbing varieties that are hardy in New England and the Middle States. We do not advise our young friends to cultivate this class, unless they have large gardens. Madame Plantier is the only variety which we retain in our garden. This rose is a profuse bloomer, and one of the most perfect white roses grown: We will mention some of the desirable climbing varieties which can be used for "Pillar Roses."

Queen of the Prairies, deep rose color.

Baltimore Belle, blush white, blooming in large clusters.

Russeliana, crimson shaded to pink.

Madame d'Arblay, creamy white.

Gem of the Prairies, carmine, blotched white, very full.

Superba, flesh color, clusters immense.

No. 2.

THE HYBRID PERPETUALS, OR REMONTANTS.

This desirable class is of comparatively recent origin, and obtained by hybridizing the Provence and Damask varieties with the Ever-blooming, or China. They in a measure combine the qualities of the two classes, but less of the China, as the name Perpetual is a misnomer, for the chief blooming ones in regular season of rose flowering, unless especial care is taken to cut off every flower as soon as they begin to wither, and keep the plant growing freely, then these plants will blossom twice or thrice in a season. Most of these Remontants are full bloomers, and the flowers very perfect. We will give a list of a few varieties we can recommend.

Auguste Mie, pale shade of rose, very full.

Baronne Provost, bright rose, very double.

Blanche Vibert, pure white, delicate grower.

Caroline de Sensal, blush, pink centre, free bloomer.

Géant des Batailles, reddish crimson, superb.

General Jacqueminot, bright crimson, very brilliant.

Jules Margottin, bright scarlet crimson.

Le Lion des Combats, *very dark crimson purple.*

No. 3.

The monthly, or ever-blooming class, are distinguished by their delicate shining leaves and stems. This class comprises four sub-classes, namely, the Noisette, Tea, Bengal, and Bourbon.

The Noisette are of rampant growth, usually flowering in clusters. In the Southern States they need no covering during the winter months, but in the North, East, and West, if buried in winter, and properly trained, they are often used as Pillar Roses, particularly the beautiful La Marque, whose pure white buds are so valuable to all florists. If planted in the ground in a greenhouse, it will climb all over the walls. We will name some varieties which we have cultivated, and know can be successfully raised, even in New England.

NOISETTE.

Aime Vibert, pure white, very full bloomer.

America, straw color.

Gloire de Dijon, blush white, buff centre.

Lamarque, large, white, shading to yellowish centre.

Minette, light crimson, very double.

Marshal Niel, very beautiful deep yellow.

Souvenir d'Anseleme, deep carmine.

Solfaterre, deep straw color.

TEA.

Adam, rich rose, salmon shaded.

White Tea, the freest bloomer of all roses.

Camellia Blanche, pure white.

Devoniensis, blush, Magnolia fragrance.

Isabella Sprunt, clear canary yellow.
La Pactole, canary color, free bloomer.
Safrona, orange yellow.

BENGAL.

Agrippina, bright crimson.
Bousanquet, blush white.
Louis Philippe, light crimson.
Madame Rohan, pure white.
Napoleon, blush, extra large.

BOURBON.

Marshal Niel, a deep buff; the *king* of roses.
Bousanquet, rich blush, free bloomer.
Duc de Chartres, large, very double, crimson.
Hermosa, deep pink, *most desirable*.
Psyche, light rose, very double.
Souvenir de Malmaison, flesh color, very double,
superb.
Sombriel, blush white, one of the best.

There are comparatively but few varieties of roses suitable for producing an abundance of flowers in winter, and these would not be called the finest varieties for summer culture. They are selected for their buds. The Safrona for instance, is selected for its deep, saffron colored buds; the full flower is but semi-double. We will give the names of a few of the roses best adapted for winter culture.

Lamarque, white, tinged with straw color.
Safrona, saffron yellow, free bloomer.

Agrippina, rich deep crimson, free bloomer.

La Pactole, light canary-color, abundant bloomer.

Hermosa, rosy pink, most prolific variety.

Gloire de Dijon, large, full, buff, shaded to salmon.

CULTIVATION.

The best soil for the rose is a rather stiff loam, although it is not particular about soil, but grows luxuriantly, flourishes well in a fresh loam with a plenty of pure air and sunlight. A stiff, clay loam will produce better flowers, and of a deeper color, than a soil of a light muddy character. If you desire many blossoms, be careful to cut off every rose when it fades away. We gather our roses so freely, we leave but few to wither. In the spring roses should be pruned thoroughly.

Many people have been discouraged in raising roses, on account of the slug and other insects; but nothing can flourish in this world, that is desirable, without care. So with the rose. Early in spring, just as the buds are starting, wash your roses in a solution of tobacco or whale-oil soap. If the insects appear on the leaf, syringe the bush freely, early in the morning or late at night, with a solution of whale-oil soap. Sprinkle wood ashes or charcoal dust around the roots.

A gardener invariably recommends monthly roses, rather than the so-called perpetuals. Those who purchase perpetuals, without a previous knowledge of their habits, are always disappointed in the few flowers they produce after the first blooming. Their great virtue is the hardy nature of the plant. The monthly roses bloom at the South nearly the whole year. But what shall we

do with these delicate roses at the North during the winter? The best way is to lay them down, and cover with sods, or earth and manure. If the subsoil is gravelly or sandy, they will surely keep, as a good drainage is necessary, without it they cannot live. The way to lay down a rose-bush is to dig a trench four or five inches deep, up to the root of the rose, then bend your rose-bush carefully into the trench, and peg it down. Cover entirely root and branches by sods, placed grassy side upwards, forming a hillock. Or cover it with earth or sand, and straw or manure.

The next important consideration is *the time at which it is done*. Few amateurs have any idea of the amount of freezing which even the tender tea roses will sustain without injury. It often proves fatal to roses to be covered too soon. It is well to cover the ground around the roots of the roses with leaves or straw to prevent the earth from freezing. In New England, the early or middle part of November is generally the time to cover roses for the winter; in the Middle States, in December. The best rule is to let your roses remain uncovered, until the ground can no longer be ploughed, or dug with a spade. This covering can be removed as soon as vegetation fairly starts in spring. Every plant thus saved possesses a four-fold value over those planted out in the spring, as the roots have been so little disturbed. Another way is to dig a trench, line it with straw, and lay in your delicate roses, then cover entirely with earth until spring. Roses that have bloomed all summer should not be potted for winter use. They need rest, and will not flourish in warm rooms.

ROSES FOR WINTER BLOOMING.

Roses for winter blooming require a different treatment, as one essential condition of free winter flowering is, that the plant has abundance of active, or, as gardeners term them, "working roots." Plants are started for this purpose either by cuttings struck in March, or else one year old plants are used. These plants should be repotted frequently to prevent their becoming pot-bound. They must never be allowed to dry or wilt in the heat of summer, else the white, working roots will perish, and before the plant can regain its vigor new ones must be formed. You must not attempt to force your rose at first; when you take it in for winter, a cool temperature will be needful. It depends upon when you desire rose-buds how you treat it. It must be pruned previous to flowering. If you desire roses the first of January, prune or shorten the shoots the first of November (earlier for Christmas). They then can be placed in temperature ranging fifty degrees to sixty degrees at night, with only fifteen degrees higher during the day. Two year old plants are better for new beginners, as they form working roots sooner, having more fibres.

In the summer the plants should be exposed to the sun; but to keep them from drying, place the pots in beds of sawdust, or refuse hops, tan, bark, or sand, whichever is most convenient to obtain.

PREPARATION.

Our young friends may desire to raise their own roses, so we will give them a few directions. The best time

to take cuttings is from October to January. The wood must be ripened; cuttings are usually made with three or four eyes. These cuttings are best put into a cold frame, or in a box prepared with equal parts of sand, leaf mould, and loam; all they require is sufficient protection not to freeze. Cuttings placed in such frames about the last of October, will be rooted sufficient to pot by March. Cuttings can be placed in rows quite near together, say an inch apart, and the rows three inches apart. This space allows you to press the soil firmly about each stem. One thorough watering, when put in, to settle the soil closely around them, will usually be all that is necessary until they begin to root in the spring. Some varieties will root much easier than others. As soon as they are well rooted, they should be potted in two inch pots, shaded and watered for a few days, and gradually hardened off by exposing them to the air; in this way they can be sufficiently rooted to plant in the open ground in April or May. Layering is more easily done from about the middle of June to the middle of September, always using shoots of the young growth — that is, a growth of three or four weeks old, or such as are not so much ripened as to drop the leaves; or in other words, the cut should always be made at that part of the shoot where there are as green and healthy leaves below as above the cut. This condition of the shoot is very important, in order to produce a well-rooted layer.

Another mode of layering, not in general use, is, to place the layer where the incision is made, in a three or four inch pot, sinking the pot in the ground to the level of the rim; all the roots being confined in the pot, when

the layer is lifted, no check is given to them. Layers so made may be planted out in the fall, and if a little mulching is given round the roots, not one plant in a hundred will fail; while if the layering is done in the usual way, without pots, a heavy percentage is almost certain to be lost during the winter. To the florist, without proper means of propagation, this method of layering roses in pots will be found very advantageous, as every layer so made will make an excellent flowering plant by spring, if kept in a green-house or cold-pit, during the winter, and will prove nearly as valuable to the purchaser as large one year old plants.

ROSE-BEDS.

Before planting a rose, be sure to find out its nature, or you may have a tall bush where you would desire a low shrub-growing rose. In arranging rose-beds, plant the tall standards in the centre. Then a row of high bush growing roses, then a row of half dwarfs, then a row of dwarf-growing roses. If this selection of the roses in such a bed is properly made, it will be pleasant to the eye from June to October. Of course the roses should be chiefly monthlies, or free-blown perpetuums.

3.—FLOWER BEDS.

THERE are a great variety of opinions as regards the most effective way of planting flower beds. Some pre-

fer to mix plants of different colors and varieties; others prefer the ribbon style of planting, now so generally seen in Europe.

If the promiscuous style is adopted, care should be taken to dispose the plants in the beds, so that the tallest plants will be at the back of the bed; if the leader is against a wall or background of shrubbery, the others graduating to the front, according to the height. In open beds, on the lawn, the tallest should be in the centre, the others grading down to the front, on all sides, interspersing the colors so as to form the most agreeable contrast in shades. But for grand effect, nothing, in our estimation, can ever be produced in promiscuous planting to equal that obtained by planting in masses or in ribbon lines. In Europe the lawns are cut so as to resemble rich green velvet; on these the flower beds are laid out in every style one can conceive; some are planted in masses of blue, scarlet, yellow, crimson, white, &c., separate beds of each, harmoniously blended on the carpeting of green. Then again the ribbon style is used in the large beds, in forms so various that allusion can here be made to only a few of the most conspicuous.

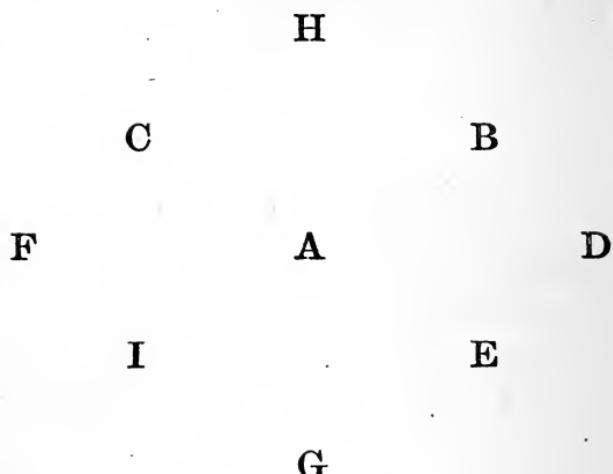
In a circular bed, say of twenty feet in diameter, the bordering can be of blue. *Lobelia*, attaining a height of six inches; next plant *Mrs. Pollock Geranium* (this does not grow very thrifty out of doors in New England), or *Bijou Zonale Geranium*, growing about nine inches high. If you plant *Mrs. Pollock*, on the next row to it plant *Mountain of Snow Geranium*; if the *Bijou* plant, a circle of the red-leaved *Achyranthus*; there are several varieties of this plant. Next the *Coleus*

Verschaffeltii; the centre being a mound of Scarlet *Salvia*. Another style is to edge the bed with *Alternanthera Spothalata* (leaves pink and crimson), which grows low and thick for a border. Then the fern-like, white-leaved *Centaurea Gymnocarpa*; next row, the Crystal Palace Scarlet Geranium. Then *Phalaris Arundinacea Picta*, a new style of ribbon grass; next *Coleus Verschaffeltii*; in the centre a clump of Coma or Pampas Grass.

There are a great many different ways of arranging these ribboned beds. It is pleasant to exercise one's own taste, therefore we only give examples to teach our readers how such beds can be prepared.

Narrow beds along the margins of walks, ribbon lines can be formed of low-growing plants, such as the White Lobelia Snow-flake, or *Gypsophila*, or Silver Leaved *Alyssum* for the front line, followed next by Tom Thumb *Trapaeolum*; then, as a centre, or third line, *Fuchsia*, golden fleeced; as a second marginal line on the other side, *Bijou Zonale Geranium*, white-leaved, with scarlet flowers, followed by a line of Blue Lobelia. Shaded stars have a fine effect on a lawn; cut a star, and plant it either with Verbenas, Petunias, *Phlox Drummondii*, or *Portulaca*. The ends of the stars should be white, and shaded to the centre, which should be dark, each point having different colors, one shade of purple, one shade of pink, one shade of red, then shades of lilac, then shades of scarlet. The centre the darkest shades. There are many pretty ways of forming the beds of a small garden. We append one diagram of a garden, and the flowers to plant it with according to our taste.

DIAGRAM.



A. Plant in the centre Scarlet Salvia, around that the white Centaurea Gymnocarpa, bordered by Blue Lobelia. (All these beds should have either a low border of box or turf.)

B. Heliotrope, with Sweet-scented Geranium at each end.

C. Verbenas, properly shaded.

D. Dwarf Trapæolum, Sweet Geranium at the points.

E. Varieties of Phlox Drummondii.

H. On the point of the shield Lemon Verbena, the remainder, Monthly Roses, border of Gypsophilia.

I. On the point, one Lemon Verbena, the rest to be filled with Monthly Carnations, bordered with Alyssum Variegatum.

F. Varieties of Zonale Geraniums.

G. Varieties of Fuchsias (if there is not too much sun). If so, plant Japan Lilies; border both F and G beds with Double Feverfew. Perhaps a bed of roses,

arranged with standards in the centre, as we have described, might be prepared for the centre bed A, and the Salvia, &c., planted in the bed H, in place of the roses.

4.—CARNATIONS.

THE cultivation of the Carnation is very simple. It is rooted from cuttings at any time from October to April, and as the plant is almost hardy, it may be planted in early spring with safety in the open ground. It is safe to put them out as soon as cabbage plants are set out. Many from ignorance keep their Carnations in a pot or green-house until the last of May, thereby losing six weeks' growth.

The Carnation cannot flourish in a wet soil, and care should be taken to secure good drainage. As the Carnation grows, if winter flowering is desired, the young shoots that the plant throws out should be cut off; this induces a steady growth. There are many fine varieties for summer growth, and but few suitable for winter flowering.

5.—FUCHSIAS.

THESE flowers are very easily cultivated from slips; any amateur florist can make these slips grow, either by planting in wet sand, or in a bottle of water. Their lovely and graceful flowers add to every bouquet. They require rich light soil, such as decayed leaves and peat,

moist atmosphere, and shade. Like the Lemon Verbena, the plants will keep all winter in a cellar. There are but few varieties that bloom well in winter. *Bianca Marginata*, white, with crimson corolla. *Speciosa*, flesh-colored, with scarlet corolla (this variety will bloom the year round, if well cared for). *Serratifolia*, greenish sepals, with orange scarlet corolla. These are recommended for winter flowering by all florists. We will mention a few varieties for summer culture.

Elm City, crimson, very double. *Venus de Medicis*, white, magenta corolla. *Rose of Castille*, sepals white, corolla violet rose. *Snowdrop*, sepals bright scarlet, corolla white, semi-double. *Striata Perfecta*, double striped blue and crimson. *Queen of Whites*, double white corolla. *Charming*, violet corolla, crimson sepals, clusters immense. *Lady of the Sea*, corolla violet purple, flowers two inches in diameter.

6.—PANSIES.

WHO does not love a pansy? They are easily raised by seed and layers. The seeds should be planted in March for summer culture, and in October for winter use. The pansy requires a rich soil.

The finest bed of English pansies we ever saw were planted in the fall, in a bed of rich soil. Before the winter snows the plants were covered lightly with manure and straw through the winter. In the spring the manure was carefully raked off, and the plants dug around with a garden fork. They bloomed early in

spring ; and, as we looked upon them by the morning light, their bright faces seemed to say "Good morning !" These lovely flowers look like happy children.

Many persons in our country call the pansy, violet ; but the gardener only calls the sweet double blue and white violet by that name. And this sweet violet hides its head modestly under its leaves, and is the flower the poet speaks of, —

" Meek and lowly, hiding 'neath its leaves of green."

The bright-faced pansy does not hide its head ; it looks you in the face as fearless as a sinless child. These violets are in great demand from their delicious perfume. These plants require shade and moisture. The best varieties are the "double blue Neapolitan" Setsenbran, single blue, very prolific. King of Violets, very large blue. Double white Neapolitan ; this does not bloom freely. Sweet-scented Geraniums, Heliotrope, Lantanas, Lemon Verbena, &c., are all easily propagated from slips. The three first require often watering with guano water, and with this treatment will fully repay all care.

7.—HOW TO PLANT HARDY BULBS.

OCTOBER, or the early part of November, is the time to plant bulbs for next year's flowering. Bulbs can be raised in any sunny place, no matter how small the bed may be ; they require less care, for the beauty of the flower, than any other class of plants. We will give some plain and simple directions, hoping our young readers may be induced to plant at least a few bulbs this fall.

The soil for bulbs should be rich and well drained ; it should also be dug deep. If water should lie on the surface long the bulbs would rot. If the soil is poor, enrich it with well-rotted stable manure, or with surface earth from the woods, or decayed leaves. Cow manure, of course, is the best. If the ground is stiff, and the manure fresh, it is well to put a little sand around each bulb. If the soil has too much clay, mix sand with the manure.

It is well to have your beds made so narrow that the weeds can be destroyed, and the ground kept mellow, without walking among the plants. Before the heavy frosts of winter appear your bulb beds should be protected with leaves. Over these throw a little brush, to prevent the wind from uncovering your bulbs. If your bulbs have been planted a year or two, cover them with manure in the fall ; the flowers in the spring will repay you for all expense and trouble.

Hyacinths and tulips should be planted about six inches apart, the hyacinth four inches deep, and the tulip three inches. The early varieties will often blossom the latter part of March. Crocuses blossom even earlier. They should be planted about three inches apart, and two inches deep. Snowdrops — the first flower of spring — should be planted in the same way as the crocus, or a little nearer together. Narcissuses, including the daffodil and jonquil, should be planted in the same manner as the hyacinth. All these bulbs can be planted in beds where you may desire to place either seedlings or any other annual, which will blossom after these bulbs have done flowering.

It is best to take up all your bulbs every third year, when they are done flowering, and separate the newly-formed bulbs from the old. Keep them in a dry place till October, then replant as we have directed.

8.—JAPAN LILIES.

OF all the valuable flowers that have been imported from Japan or China, during the past twenty years, nothing equals the exquisitely beautiful Japan Lily—*Lilium Lancifolium*. No description can do anything like justice to these flowers, or show the beautiful, frost-like white of the surface, glistening like dew-drops; or the rubies that stand out on the surface of one of the varieties, while the end of the leaf is shaded like the exquisite pink, or the inside of some sea-shells from India.

There are nine varieties. The pure white and crimson, *Lancifolium Monstrosum rubrum*; the pure white *Lancifolium Monstrosum album*, and a delicate rose of the same variety; then the dark crimson, *Lilium Melpomene*; white, spotted with delicate salmon, *Lilium Punctatum*; the pure white, with projecting glistening spots, called *Lilium Lancifolium album*; *Lilium Lancifolium rubrum*, white ground, spotted with crimson; *Lilium Lancifolium roseum*, shaded and spotted with rose; and *Lilium auratum*. This is sometimes called Golden-banded Lily, and is truly the king of the lilies. The flower is ten to twelve inches across, composed of six delicate white ivory parts, each thickly studded with crimson spots, with a golden band through its centre. In addition

to the beauty of these lilies, they are fragrant, and as hardy as any of our common varieties.

Strong bulbs send up flowering stems from three to five feet in height, and begin to bloom about the middle of August. Each flowering stem will have from two to a dozen flowers, according to the strength of the bulb.

Rich garden soil is all that is needed for these lilies. Plant them in October or early in November, about a foot apart, and five inches deep. The bulbs should remain several years, if possible, without removal. These must be the lilies that surpassed Solomon in all his glory. *Lilium Longiflorum* is called very beautiful. The flowers are snow-white, trumpet-shaped flowers. *Lilium Brownii*, new variety, superb white.

9.—CAPE BULBS.

THESE are so called from coming from the Cape of Good Hope. The *Gladiolus* is the finest variety. These bulbs are easily cultivated in New England and the Middle States; they can be planted out as soon as all fear of frost is passed. They will bloom by the last of July, and by making successive plantings every two weeks to the middle of July, they can be had in perfection until the frost returns. Although they are not particular about soil, yet if choice can be had, a sandy loam, peat, or a soil of decomposed leaves, is better than a stiff clay soil.

In any soil, if it is well enriched, the flowers will increase in size and beauty.

These bulbs should be taken up as soon as the stems begin to wither in the fall; but should the stalk of the late plantings be yet green, the bulbs should be left adhering to the stalk until dried, which will ripen off the bulbs. They can be kept in winter under the stage of a green-house, or in a frost-proof cellar or closet, or in any dry place where potatoes will keep. It is impossible to mention varieties; all are good, and new varieties increase yearly.

10.—HOW TO GROW BULBS IN WINTER.

BULBS can be grown in vases, bowls, dishes, cornucopias, &c., of whatsoever shape or form, from the small ornament that will hold a crocus, to the large family punch-bowl, capable of growing a dozen hyacinths. Wire or rustic work of any kind, lined or not with zinc, and filled with moss, will grow bulbs to perfection. A zinc frame can be made to fill the whole front of any window; and if filled with moss or sand, and planted with hyacinths, lily of the valley, crocuses, snow-drops, tulips, narcissus, and polyanthus, would in itself form a complete miniature winter flower-garden. These, with successive plantings, may be made so many connecting links between our autumn flowers and the early spring blossoms.

Take a common soup plate, place in it as many strong bulbs as it will hold easily, and fill in about half an inch of water. In a few days the roots begin to spread, and so clasp each other in the course of a few weeks, that

they form a natural support. If the bulbs and plate are covered with moss, it improves the appearance. For winter bloom successive plantings can be made every two weeks, from September till January. After the early part of December, hyacinths intended for glasses had better be half grown in pots, then turned out and the roots carefully freed from the soil in tepid water, then placed in glasses. In this way they will blossom sooner. The soil used to cultivate bulbs should be light and rich, full half sand. Bulbs can be grown in moss by keeping it damp. They can be raised even in clear sand. Take any ornamental dish capable of holding moisture, and fill it with sand in a pyramidal form. In the centre plant a hyacinth, and at equal distances round it plant three or more, according to the size of the dish; fill up the space with crocuses, snow-drops, dwarf tulips, &c. In planting, the bulbs should be covered with sand, all but the tops. Then place the dish of bulbs in water five minutes, in order to fix the bulbs firmly in their position. Repeat this bath once a week, never allowing the sand to become dry. Place it in the dark for two weeks, then keep it in a cool, light, airy room.

There is no bulb so well adapted to house culture as the hyacinth. They grow easily in pots or glasses. They will grow in almost any light, sandy soil; but just in proportion as this is adapted to the plant, will the perfection of their culture be attained.

For pot growing, the hyacinth, to attain its greatest beauty, should be grown in pots seven inches in diameter, and the same depth. They will grow and blossom in pots of four or five inches in diameter. Only one

bulb should be planted in a pot. Two or three can be grown in larger sized pots. Put over the hole in the bottom a good drainage, half an inch or more in depth, on this either a handful of leaf mould, very old cow manure, or the coarse part of the compost ; then add the prepared soil, filling up the pot to within an inch of the top. On this place the bulb, covering it with soil all but the top ; press the earth gently around it, and shake the pot slightly, to settle the soil, and finish with a good watering ; then either plunge the pots three or four inches in some old hot-bed, and cover with leaves, or place them in the dark, covered carefully, but in a dry place, for several weeks, to allow the roots to make a vigorous start. Water them very slightly at first, then gradually inure them to the sunlight. As the flowers expand, place a saucer under each pot, which must be kept filled with water till the flowers begin to decay ; then lessen the water till withheld entirely.

For planting in glasses, the last of October or early in November will do. Use only rain or spring water. Fill the glasses with water, and place the bulb so that the roots will just come in contact with it ; set them in a dark closet, or on a shelf in a dry cellar, and let them remain till the roots have started, usually in three or four weeks ; then remove them to any place which is well lighted and warm, keeping them from the sun till they look a deep green ; turn them around now and then, and change the water once in three or four weeks. If you perceive the roots look slimy, and the water fetid, carefully remove the bulb, and place the roots in clear water of the same temperature ; wash the roots gently ; cleanse the glass before replacing the bulb.

11 — GARDEN INSECTS.

IN presenting this subject to our readers, it will be difficult to decide where to begin, or where to leave off. With the first warmth, aphides, or plant lice, in shoals and nations, show their unwelcome presence on our roses, geraniums, and almost all choice plants. Many of our choice fruit trees are infested with these pests of the garden. They are exceedingly prolific. Réaumur has proved that one of these insects, in five generations, may become the progenitor of nearly six thousand millions of descendants. They fasten themselves in crowds on a plant, and suck the life from it. Some live in the ground and infest the roots of plants, such as verbenas and China asters. We have often, on seeing a plant drooping, saved it by taking up the plant, root and all, and washing it in strong soap suds; replant it, after carefully scalding the earth, and digging it in. The plant should be protected from the sun for a few days, until the roots start again.

The best remedy for these plant lice is to syringe them with a solution of whale-oil soap, or a mixture of soap suds and tobacco water, used warm. Still another remedy is a solution of half an ounce of strong carbonate of ammonia in a quart of water. Where it is possible, dip the infected branches into either of the above solutions, holding them carefully in the solution several minutes.

A drying east wind makes insects abound, and rain clears them away.

The rose-chafers, or rose-bugs appear about the second week in June, and remain thirty or forty days. They infest rose bushes and grape vines. They must be carefully picked or brushed off into a basin of hot water, or burned, as they increase thirty fold, and destroy both fruit and flower.

Caterpillars of many butterflies and moths are destructive in a garden, and, when the perfect insects can be caught, before they lay their eggs, one death will save much killing. Whenever one is found resting quietly on a branch, stem, or leaf, with the wings folded, it is most likely a female about to lay her eggs, and it had better be killed. If a butterfly or moth is found so placed, dead, she will have laid her eggs; be sure to find and destroy them. As the season advances, destroy every chrysalis you find.

Possibly some of our young readers have never seen a chrysalis, and may not know what it is. We will try and explain this to you. Every species of the butterfly, or moth, is first a grub or caterpillar, crawling upon, or in the earth. These caterpillars, when they have completed the feeding stage, retire to some place of concealment, under a leaf, beneath palings, or in interstices of walls, spin a tuft of silky fibre, and entangle the hooks of their hindmost feet in it. Then they form a loop, to sustain the fore part of the body in a horizontal or vertical position. Then they spin a band over the back; and most caterpillars form a cocoon, in the shape of the letter U, around the body. Then they cast off the caterpillar skin, and become a chrysalis. In summer the chrysalis state lasts from eleven to fifteen days. Later

it lasts all winter (while in this state these insects remain dormant). At the proper time the chrysalis bursts open, and a butterfly issues from it. We have often found these cocoons, or chrysalides, and taken them to our rooms to watch the coming forth of the butterfly.

Rose slug (Lelandin Rosæ), a light green, translucent little fellow, varying from one sixteenth of an inch to nearly an inch in length. There are evidently two species or varieties, one of which confines its ravages to the lower side of the leaf, the other eats it entire. The first is by far the most destructive here. In a few days after the plants are attacked they appear as if they had been burned.

The only remedy we have found is a preventive one, which, in fact, ought to be used against all insect life. We have spoken of this (and will not repeat) in our rose chapter. The only remedy, whale-oil soap, is prepared by florists by dissolving one pound to eight gallons of water. They apply it *ten* days in succession, with a garden engine or syringe. This must be done very early in the morning, or late at night, as the slug shuns the light of day, and hides under the leaf. With very young, delicate roses, the solution is too powerful; hand work will be necessary to pick them off. English sparrows, a comparatively late importation, should be kindly treated by all, as they are the best exterminators of injurious insects. The ground, or blue aphid, and verbena mite, are among our most subtle and dangerous of pests. They work at the root, and often before we can see the plant fading, they have taken its life. The florist's rem-

edy is as soon as you see the least sign of drooping in your Asters or Verbenas, the plants most afflicted by them, water them copiously and persistently at the roots, with tobacco water, the color of strong tea, and apply it daily for one week. We often take up the plants and wash the roots, but it is a harsh remedy: it will kill or cure.

12.—SOME USEFUL HINTS.

WE have, in studying different books on horticulture, found many opposing sentiments. Some seemed like hearsay to all former experience, yet we ought to be ready to receive all advice based upon positive experience. We intend acting upon some new theories of Peter Henderson, a famous gardener near New York. We have always supposed it very injurious to take water directly from a cold spring to water plants, and that rain water or soft water must be used, at the same temperature as the air in which the plants are growing. He says it is a foolish dogma, as the water will take the same temperature before the plant can be injured. Of course if the plant was to stand in cold water it would injure it. This will save much extra trouble; we ourselves shall profit by his advice, as he ought to know, having faithfully tried the experiment.

We have always supposed it necessary for the health of a potted plant to have a sufficient amount of bits of oyster shell, &c., at the bottom for drainage.

Mr. Henderson says, for fifteen years he has grown all

his thrifty plants *without* the use of crock, charcoal, or any other substitute, and he considers it useless trouble; he thinks the moisture escapes freely from the sides of the pot. He says when we wish to resuscitate an unhealthy plant, we wash the soil from its roots, and put in a *new* pot, where the drainage is perfect from the sides. He has grown *millions* of healthy plants without draining. He thinks old pots, whose pores are all filled, often cause the death of a plant. He approves of frequent change of pots, as it injures a plant for the roots to become hard and woody. In most cases the slightest tap on the edge of the pot is sufficient to turn out the ball of earth. Be careful and not take too large a pot; the size must increase gradually.

Mr. Henderson thinks it is not unhealthy to sleep with plants in the room, as we have always been taught. He says it is a common practice for gardeners to sleep in their green-house, and to be with their plants often at night, and yet, as a class, they are vigorous men. He himself, for three winters, slept on the floor of the hot-house, without any injury, and that was more than a score of years ago.

Plants can easily be sent by mail, by first washing the roots in water, then take them dripping and wrap them in dry moss, then roll around them several thicknesses of thick brown paper; the whole must be *tightly* rolled, to prevent the dry air penetrating to shrivel the plant. In this way plants can be sent even two thousand miles at a cheap rate, as our postal laws only charge two cents for four ounces, unless the package exceeds four pounds.

13.—MOSS BASKETS.

TAKE a piece of the spring used in hoop-skirts, or a rattan, and make a small hoop about eight inches in diameter. Collect from the woods a quantity of the long, feathery moss, and wind a heavy wreath of this moss on a hoop, then cover a piece of the rattan or hoop-spring, sufficiently long for the handle, with moss, and fasten it to the hoop. Then take a solid bunch of this moss, the size of the centre of the hoop, and push inside of this moss-covered hoop; this forms a moss basket. Take a common plate, and place this basket upon it, and sprinkle it thoroughly with water. This basket can be filled again and again with bright flowers, casting away the flowers as they wither. The wet moss will keep them fresh as long as if placed in a vase filled with water. Now and then place this basket in a dish of water, and sprinkle it, or let the rain fall upon it. This will freshen the green tint of the moss.

Baskets covered with the knitted moss, which in our work department we have given the directions how to prepare, are very pretty. A tin dish should be made to fit it, and painted green; keep this filled with natural flowers, or French artificial flowers, which imitate nature perfectly, can be arranged in them, and if placed on a bracket, or in some place where they will not be likely to be examined too closely, they will easily pass for fresh flowers.

To form a pyramid of flowers, take three, four, or five wooden bowls, according to the size you wish for your

pyramid ; let them be a regular gradation in size ; procure some round pieces of wood, like ribbon blocks, graded in size, glue the tallest into the centre of the largest bowl so that it will stand upright, and up on top of that glue the bowl next in size, and so on to the smallest bowl. Varnish the inside several coats ; paint the outsides green, and cover with moss ; some have a stand made, and glued to the bottom of the largest bowl. When filled with flowers it is a lovely sight. Baskets made of tin and painted green, then covered with moss, make the prettiest hanging baskets possible. Tin rings, large enough to surround vases placed inside, and made to hold water, with little wires across the top and painted green, when filled with flowers, form the prettiest mats in the world ; the wires keep the flowers in place. I saw one filled with only rosebuds, blue forget-me-nots, and geranium leaves. It is an improvement to cover the outside with moss. Crosses made in the same way are very beautiful, and are appropriate to place on the grave of any beloved friend. In that way flowers can be preserved a long time, if there is a sufficient supply of water to preserve them.

There are innumerable ways of arranging flowers. The poorest person can afford to purchase a tin basin, and with a little common paste and moss, which can be found in all country places, a pretty dish for flowers is soon made. Shells make lovely vases. The large shells sailors polish so exquisitely to resemble mother of pearl, make elegant hanging vases ; bore holes on each side and hang them with strong cords.

The month of September is not too late to make a fine

collection of mosses from mountains and valleys. Mosses will have attained by this time a luxurious growth. There are but few mosses that look well after being pressed. The best way to preserve a collection of mosses is to arrange them in some suitable box, as they grow, and in the order you desire to keep them, and let them dry slowly. If you wish to cover any box, basket, or vase, it is better to paste them on, before they are entirely dry, with common paste. The dry white and gray mosses form very beautiful receptacles for flowers, by covering the outside of any rustic basket with the moss. Thread wire will fasten it firmly to any basket, or rustic work. Paste or wire can be used to fasten it on to boxes or bowls.

We have seen a lovely rustic stand for flowers, formed from a common wooden box (a large bowl is the more desirable). The handle was formed from a barrel hoop. The legs of the stand were made of gnarled branches of trees. Then fine annealed wire was wound over the whole. This served to hold the moss firmly to the box. The beautiful curled white, gray, and green dry mosses were then arranged all over the box, legs, and handle, so as to give grace and beauty to this inexpensive stand. This box was then filled with rich loam, and planted with purple, white, and pink Maurandia, and variegated Myrtle. These vines twined over the handle, and festooned the sides of the box. Lobelias, Fuchsias, Nierembergias, white and scarlet monthly Pinks, silver-leaved Geranium, and King of the Scarlets, also one white monthly Rose in the centre, filled the box with bright flowers all summer. This inexpensive flower-

stand was constructed by a boy during his school vacation, and it formed a beautiful centre ornament to his mother's front yard. In the winter the good mother had her boy's work carefully removed and placed in her bay window. There it blossomed, and spoke cheering words to her of her absent darling, as she sat day by day, during the cold winter months, sewing by its side.

14.—HANGING BASKETS.

HANGING BASKETS are now in such universal use, that the taste for them has extended to every town or village in our land. All florists keep a supply of baskets, with flowers planted and growing, ready for sale. These baskets are quite expensive. We will give directions for some equally pretty, but inexpensive, which any ingenious boy or girl can make.

Take a small wooden bowl, bore holes in the sides to fasten in a cord, or screw in rings. Cover this with cones, acorns, black beans, &c., in fact, any pretty seed can be used to good effect; arrange them in different forms, like flowers. Varnish with asphaltum varnish. A cocoanut shell makes a pretty small basket. Either of the above are pretty with the white and green dry moss glued over the outside. Baskets can be made of sticks of the oak or maple tree, choosing those of the size of a man's thumb, and cutting them of equal lengths, eight, ten, or twelve inches, according to the size of the basket desired. Then build your basket like a log hut; interlace your fingers, and you will see the

design. Nail these sticks firmly in place, fasten in a wooden bottom. Heat a wire and thrust it through the end of each stick, and bend it into a loop ; suspend it by cords fastened to these loops. This makes a durable basket to hang out of doors ; any boy of twelve could make it.

Rustic baskets can be made with or without a wooden frame, but a wooden bowl is a good foundation ; procure from the woods a quantity of blasted branches, or other crooked, rough, or knotty twigs. Soak them in hot water or steam them, so as to make them pliable. Stain the bowl with asphaltum or black varnish, then screw in rings for the hanging cords to pass through. When the varnish is dry, bend around the outside of the bowl one of the twigs or blasted branches, and nail it securely at the top edges on either side. Twine several pieces around in this way, according to your taste, until the whole surface is covered ; finish by nailing one around the rim of the basket for a border. Varnish the branches like the bowl. The entire basket is then ready for use. All kinds of shaped baskets can be made out of wire, painting them green, and filling in moss in all the crevices ; a painted tin dish, placed in for the dirt, will surely prevent any drip ; thick moss is ordinarily sufficient. All kinds of these baskets should be filled up with light, sandy loam ; a few bits of charcoal, and a piece of sponge in the bottom, assist in keeping the soil moist. Light, trailing vines should be trained to fall over the sides, and loop in and out of rustic work. We will give a short list of vines suitable for baskets.

Lobelia *Erinus Paxtoni*, an exquisite blue.
White and pink Gypsophila.
Panicum Variegatum.
Tropæolum, ball of fire.
Convolvulus Mauritanicus.
Variegated Myrtle.
Geranium Peltatum Elegans.
Nierembergia.
Linaria Cymbalaria.
All varieties of *Maurandia Barclayana*.
German Ivy.
Alyssum Variegatum.
Vinea Elegantissima Aurea.
Moneywort.

PLANTS FOR THE CENTRE.

Centaurea Gymnocarpa.
Alternanthera.
Sedum Sieboldii.
Bijou Zonale.
Achyronthes Gilsoni.
Mrs. Pollock, &c.

These baskets should be exposed to the sun at least two or three hours daily, and in dry weather watered freely. If the surface of the basket between the plants is covered with moss, it will prevent the earth from drying as soon, and the basket will look neater.

Baskets of moss and wire can be every week dipped into a pail of water.

15.—ARTIFICIAL ROCKERIES.

A WELL-FORMED and flourishing rockery is an ornament to every lawn.

Petrified wood forms very beautiful rockeries, but as our purpose is to assist our young friends to make their own rockeries, we will leave the more elaborate to the gardener.

Save all the clinkers from your furnace coal, dip them in a hot lime wash to color them pure white, their fantastic shapes are thus more conspicuous; arrange them in a mound according to your fancy; leave at suitable distances cavities of six or eight inches deep, to be filled with soil; in this plant your creeping plants; bright colors should be selected for a white rockery. Dwarf Scarlet Tropæolum, Scarlet Verbenas, Petunias, Golden Moneywort, Lobelias, Scarlet Geraniums, Myrtles, Coleus, German Ivy, &c., are used to good effect on this rock work. Hydraulic cement instead of lime will make a pretty drab color. If the rockery is protected by some shade, it looks well to plant it with Ferns and Lycopodiums.

16.—FERNERIES.

Is it not, friends, very pleasant to have a bit of the summer woods in our parlors in midwinter? Such a pleasure is within the reach of us all, with but little trouble and expense. Those who live in cities, and cannot go into the country, surely must have some friend

who can supply them, or the materials can be obtained at any public green-house. First you require a glass dome, or what is still better, take five panes of glass, any size you please, four to form the sides, one for the top ; fasten the glass together with a light wooden frame, then take any tin dish, like a baking pan, or if round, a tin plate or jelly cake pan, or a tin dish can be made to fit it for a trifling sum of money ; paint the tin green on the outside. Then collect some pieces of broken flower pots, or still better, bits of marble, granite, or any stone, and scatter them around the tin dish, placing in the centre some moss-grown stump or stick, and pile the stones around it ; then collect from the woods ferns, mosses, partridge vines, with its bright red berries (indeed any plant will grow in these ferneries which can be found in moist places in the woods) ; take up a little of the leaf mould in which they grow (they need but little soil), arrange your plants, spreading the roots carefully over the stones, scattering a little leaf mould on them, and place your mosses around the whole. The tallest plants should form the centre, but in arranging even ferneries, it is more agreeable to exercise your own taste. Before placing your globe or glass frame over your fernery, sprinkle the plants thoroughly, then cover with the glass, and let it remain a few days in the shade. You can keep them where you please, but they grow better near a window ; be very careful not to water them too often ; once a month is generally sufficient ; if too wet, they will mould and die ; when there is but little moisture on the glass, it is well to raise the glass to ascertain if it is dry. Our fernery has been made four years ; it has

required but little care ; now and then we add a new fern, some moss, or any suitable plant gathered from the woods, and remove any dried ferns or leaves. It often renews itself. Trailing Arbutus and partridge vines will blossom in ferneries. It is always pleasant to the eye, and no care after the first expense and trouble. Ivy and Lycopodium grow well in ferneries, but the rare ferns, &c., from green-houses do not flourish as well as those plants taken from our native woods.

17.—IVIES.

ENGLISH IVIES are a great ornament to our rooms, and are hardy, and require very little care. After the first two years they grow quite rapidly, therefore it is well to procure two-year old plants ; train them on your curtains, over your windows and pictures. Many make a mistake by changing the pots very often, thinking they require a very large pot, which is not so, for they do not require as much earth as many plants, only keep them moist, and have rich loam for the soil ; it is well to water them every month with guano water, prepared according to the same rule given for flowers. The Poet's Ivy is very pretty, the leaf being quite small. The most beautiful ivy we ever saw was one that never was removed from its place, summer or winter ; it filled a large bay window, encircled the whole room, and wound around many pictures ; now and then a gardener came and changed the soil, and the leaves were occasionally washed.

18.—PRESSED FLOWERS.

To press flowers, to be arranged on paper like a painting, you must take some plain white wrapping paper (in Paris you can obtain paper prepared by a chemical process to preserve the colors), and place your flowers or leaves carefully between two sheets of the paper. Then press them by placing a heavy weight over them (letter presses are excellent), and leave them a day or two, then change the paper; thus the juices of the flowers are absorbed. It takes a week or two to press perfectly, and in summer often longer. When dry, place them in a book or some air-tight box, ready for use. A year is required to make a varied and handsome collection, as each flower has its own season for blossoming. Wild flowers retain their colors better than cultivated; but experience alone will teach you what flowers will retain their color best. Many pretend to be able to preserve all kinds of flowers, but it is impossible. I will give a list of flowers which are known to retain their color by this mode of pressing.

All Geraniums (except the horse-shoe and sweet-scented) preserve their color. They are very essential, as their colors are brilliant and keep for years. All yellow flowers, both wild and cultivated, retain their color. The Violet and Pansy, Dwarf Blue Convolvulus, Blue Larkspur, Blue Myrtle, Blue Lobelia, Heaths, the small original Red Fuchsia, Wild Housatonia, and many tiny blue, and even white flowers press perfectly.

For green, Ivy, Maiden Hair, Ferns or Brake, Mosses,

&c., retain their color best. Rarely a cultivated green leaf presses well. Autumn leaves, if small, and the youngest oak leaves, mix in well. Certain kinds of stems, such as Pansy, and others of similar character, are best adapted for pressing.

After your collection is made, take some card-board, without a polish if possible, and arrange your flowers as you design to have them. Gum them to the paper with tragacanth, using a camel's hair brush, then press on the paper and flower with a cloth, carefully absorbing all moisture, as well as firmly pressing the flower on the paper. Geraniums and some large flowers look better if each leaf is glued on separately.

In forming your bouquet, it is better to arrange the stems first and work upwards. Baskets and vases of moss with flowers are pretty. To form these you must trace out with a pencil your vase or basket, and glue on the moss. Then arrange your flowers.

We have heard amusing criticisms on the coloring of such bouquets from persons who mistook them for paintings. Framed and covered with a glass, they make ornamental pictures.

It is a pleasant way of preserving mementos of friends, places, or events. Flower albums or journals are very beautiful. Wreaths arranged of different varieties of Pelargoniums, mixed in with any pretty green, and other little flowers, such as Lobelias, are very handsome, and the colors are durable. Pansies of different shades look well, and brilliant wreaths may be made of all the varieties of flowers that hold their color. The oval shape looks the best for wreaths.

There are innumerable varieties of Ferns, Lycopodiums, and Maiden Hair, both native and foreign, suitable for pressing. By pasting each specimen on a separate sheet, and interspersing specimens of our beautiful autumn leaves, also on separate sheets, and fastening them together, either bound as a book, or in a portfolio, you will possess a beautiful and attractive book with but little expense.

Crosses can be arranged with Ferns, and shaded to appear as if painted in perspective, and look like a cross standing on a mossy bank, with flowers, &c., growing around and over it. First draw and shade your cross, as a guide, then take the small leaflets of the darkest colored ferns you can procure, and glue them on carefully where the cross should be in shadow darkest, then take the brighter green Ferns (such as are gathered in spring), and end with the white Ferns (which can only be obtained in the fall), using them for the lightest shade; be careful to cover every part, and shade it with Nature's colors as you would with paint. In a cross six inches high, and suitably proportioned, full two hundred of the tiny leaflets of the Fern may be used to good advantage before it is completed. Then take wild Lycopodium, if you can obtain it, if not, the finest of the cultivated, and arrange it on your cross to look like a vine growing over and hanging from it; also paste on to it tiny little pressed Lobelias, and arrange small Ferns, mosses, and any little flowers (wild ones are preferable) around the base of the cross, to look like a mossy bank. Different designs can be arranged in the same way.

Be very careful in pasting on flowers and leaves, that

every part, however small, is firmly fixed to the paper ; press them on after pasting with a dry cloth.

September is the time to collect the beautiful white ferns ; the first slight frost turns the green fern white. They should then be gathered at once, and carefully pressed ; when dry they resemble the skeleton leaves. A vase of these forms a beautiful winter ornament. If you defer gathering them till the heavy frosts come, they turn brown.

19. — STRAWBERRIES.

A FEW hints as regards the cultivation of strawberries may be useful to both boys and girls ; for fine berries can be raised even on a small plot of ground, if the soil be rich. Plants for a new bed should be set out early in the spring ; the roots will then grow strong, and the plants will be better able to bear the cold of winter. Some gardeners prefer to plant their strawberry roots in August, or even late in the autumn, and if the winter is mild, or deep snows cover the ground, the vines will live and bear fruit the next summer. Some prefer to raise strawberries in hills, but the most prolific vines are those planted in beds about three feet wide, with a path between, filled with straw, to keep the fruit from the ground ; it is well to cut off most of the runners. Of course the beds should be kept free from weeds. There are many new varieties, but the old Hovey's Seedling is as reliable as any, and very prolific. The Russell is easily propagated ; vines planted in April will often yield

fine strawberries in June. The Wilson is a profitable strawberry for the market because of its large yield, but it is hardly equal in flavor to the Hovey.

The Hovey will soon run out if planted by itself; it requires some other kind to be planted with it. The Pine is usually the variety selected for that purpose. It is useless to enumerate the several varieties, for nearly every locality has its favorite strawberry. Some kinds will scarcely bear a perfect berry in some locations, while in a different locality the same plant will be loaded with perfect fruit. Sometimes a healthy and vigorous-looking bed of strawberry plants will produce but few berries; then you must examine the blossoms, those which bear fruit will have the berry formed in the flower, while others will blossom freely, but do not bear fruit; these are the male plants, and it is better to leave but few of them in your strawberry beds. When you plant the new roots, dig a hole with a trowel and fill it with water, then spread out the roots and pack the earth close around them; but when they are fully rooted, and commence to grow, the earth should be kept loose around them.

Strawberry plants should be replanted every third year; it is best to change the location of the bed if possible, or at least to renew the soil. Boys or girls who raise and gather from their own little garden a dish of strawberries, will find great pleasure in presenting it to their friends as fruits of their own labor.

20.—GRAPES.

THE care of the grape vine is a pleasant occupation. To gather the rich, ripe bunches of its delicious fruit is a grand enjoyment. Almost every one can command a spot of ground sufficient for the liberal support of a grape vine. It may be planted in any unappropriated corner about the house—a sunny spot is to be preferred; but a vine may do well with but little direct sunshine, if it is well sheltered and properly cared for. It may be planted at the foot of a tree, the branches of which are not near the ground, and it will find its way high up the tree, and will yield large crops of fine fruit, hidden among its own thick foliage and that of the tree, provided the ground immediately about its roots can be reached and kept warm by the sun's rays.

As it grows, it will endeavor to adapt itself to the circumstances that surround it, and will take the direction your taste or convenience require it to follow. Its flexible branches are obedient to the gentle hand of the careful cultivator. You may train it upon stakes six or eight feet high, or upon a low trellis where the fruit will be within easy reach of your hand. You may have the fruit within a few inches of the ground, or by removing all the lower branches of the vine, you can cause the ripe bunches to hang in graceful festoons around and over the window of your chamber, high above the reach of accident and pilferers. The grape vine will do as it is bid, which is much more than can be said of some young people, whose eyes sparkle at the sight of its fruit.

In preparing the ground in which to plant the vine, reference must be had to the character of the soil. If the soil is clayey and cold, or if the neighboring surface is such as to turn an undue proportion of the rains upon the place where you propose to plant your vine, care must be taken to secure for the roots of the vine a sufficient drainage. If the roots of the vine are surrounded by wet and cold earth, the fruit will mature slowly, and will be endangered by the early frosts. You will secure a sufficient drainage by digging a hole three feet deep and five or six feet in diameter, and throwing into it small stones, fragments of bricks, or other like rubbish, to the depth of about eighteen inches, and filling to the surface with the soil. If the soil in which you propose to plant your vine is light, no artificial drainage will be necessary.

Dig over the ground, and mix with it some well-rotted manure or bone dust to the depth of your spade. The plan of trenching and deep-manuring is of questionable advantage. The roots of the vine prefer to run near the surface, but they will seek the rich soil wherever it may be; and if they are drawn away from the surface of the ground and out of their natural direction to the colder soil below, the effect upon the fruit may be unfavorable, both as to quality and quantity.

In the ground thus prepared, set your young vine from the nursery. First, drive down a stake to which you can tie the young vine, then place the roots of the vine three inches below the surface of the ground, carefully spreading the roots so that they will be as nearly as possible in the position in which they grew in the nursery.

The beautiful operations of nature will then commence. The roots of the vine will at once begin to adapt themselves to their new home, and their delicate fibres will firmly clasp the particles of the well-prepared soil; the warm days of the early spring will draw the sap up through the whole length of the vine; the buds will open and exhibit their delicate tints, new shoots and broad green leaves will follow, and you can soon eat the fruit of your own labor, sitting beneath the shadow of your own vine.

21.—HOW TO ARRANGE SEA-MOSSES.

WHILE our young friends are enjoying the pleasures of the sea-shore, there is no more delightful employment than gathering and preserving the beautiful flowers of the sea.

September is the time to collect the finest varieties of sea-mosses. Before you commence to arrange them, procure two pieces of deal board, about twenty inches long and twelve inches wide; some light-brown paper, and blotting paper, and white drawing paper. You will need camel's-hair pencils, long, slender darning-needles (or common needles mounted on lucifer matches), a small piece of alum, and old cotton or linen cloth.

The best time for collecting the mosses is in the early morning, when, on your return, there is leisure for immediately laying them out. If you leave them until the next day, the chances are that one half of them will be spoiled. Do not collect many mosses at one time; for

these flowers of the sea fade, and even decompose very fast, when roughly handled or carelessly gathered. If you cannot arrange them at once, put them either in an oil-skin bag, or a tin can, with sea-water. When you are ready to arrange them, take your drawing paper and cut it into large and small squares, or any size you desire. Get some soup plates, or any shallow dish; fill with fresh water; place a small piece of alum in each dish. Now have your camel's-hair pencils and darning-needles, or needles mounted on matches, by your side. Then float a piece of sea-moss in fresh water. If very dirty or sandy, wash it first in clear water. Float it on a piece of paper, which must be placed under it with the left hand, while with your right hand you arrange the plant in a natural manner, using your camel's-hair pencils and needles. Superabundant branches can be thinned out with small, sharp-pointed scissors. When the specimen is placed as you like it, cautiously raise the paper, that the position of the plant be not altered, and let it rest somewhere with sloping inclination, that the moisture may run off, while other specimens are treated in the same way. Do not leave them long thus, for they must be pressed before the paper is dry. In drying them, you must lay either old soft linen or cotton over them; to prevent its sticking to the upper paper when pressing; as, in order to press it, you must first lay them in blotting paper, and then in brown, and place them, thus prepared, between your boards, and strap the two boards tightly together. The blotting paper and old cloth must be changed at least twice in drying large sea-weed. The second day place a heavy pressure on the boards used in pressing.

Sea-mosses are glutinous, and must be dried, and not pressed ; and, when finished and dry, then moisten the under side of the paper, and press it gently. Others will not adhere to paper, and therefore, when dry, should be brushed over with a little isinglass, dissolved in gin, laid on warm ; and they will then be fixed closely to the drawing paper.

Another preparation is one ounce of oil of turpentine, in which some gum mastic, the size of a nutmeg, has been dissolved. This gives a gloss to the specimen, and helps to preserve the color.

The finest and rarest specimens are found in the lowest tide pool, or cast up after a storm.

We have seen these sea-mosses, or sea-weeds, exquisitely arranged, representing flower painting.

Take the pink and green sea-weed, and with practice, moss-rose buds can be perfectly represented, also other flowers. Be careful and select fine-grained, at the same time *strong* paper.

Every lover of nature should always possess a microscope. Examine with it many tiny specimens, condemned as too small to arrange in your album ; it will reveal to you such form and color, provision and harmony, as the Almighty Creator conceals from the unseeing eye, and reveals to patient and intelligent search.

House and Home Arts.

1.—KNITTING.

PLAIN knitting is but little noticed since knitting machines were invented. At present crochet work has taken its place, and fancy tatting. It will not be necessary for us to give any especial directions for these kinds of work, as nearly all our magazines give new directions in every number. But both crochet and tatting require eyesight. If a child is taught in early youth to knit well, all common knitting can be done without eyesight. We can *think* better if our hands are employed on plain knitting. If our eyes have been overtired, and cannot bear the light, we can knit in the dark. We always keep some common knitting, such as strips for a blanket, or stockings for the poor, on hand; and it is astonishing the amount of work accomplished in this way, as we can knit, if a neighbor calls, for it does not prevent our conversing freely, also we can knit and read.

We earnestly advise our young readers to learn to knit. Many persons in the present era are afflicted with weak eyes, and dislike to be idle; the knowledge of knitting would be a pleasure, also of netting, as that requires less eyesight than other branches of work. We will

give the directions for knitting a few fancy articles, also the directions for knitting a common stocking, so that our young girls can knit substantial stockings for the poor. During the last war, when our young ladies were called upon to knit stockings, how few knew how! So many, who earnestly desiring to do their part, were obliged to learn the rudiments of knitting!

2.—HOW TO KNIT A STOCKING.

FIRST select four smooth steel needles of a size suitable for the woollen or cotton yarn you intend to use. If you cannot tell yourself, the person of whom you purchase your yarn can select suitable needles. Your stitches should be cast on with double yarn. Knitting them on is preferable; first form a loop on one needle, then by knitting that loop with another needle, the required stitches can be formed. Some persons prefer a little elastic roll at the top; this is formed by knitting eight or ten rows round plain, then turn directly back and knit on the wrong side a few times.

But the most common mode is purl every two stitches. This is done by knitting two stitches and purling two. It is well to continue this for a gentleman's stocking or a boy's all the way to the heel, as they cling better to the leg, or purl two and knit two for a half a finger, then knit a finger and a half plain, and end the leg part by purling two and two again at the ankle for an inch. If the stocking is for a lady, after knitting four or five inches from the top (the first inch being purled every

two stitches), the narrowing should be commenced. In plain knitting, one needle is called the seam needle, for the centre stitch should be purled, and one must be taken to purl that same stitch the whole length of the leg. The narrowing of the leg should be done on each side of the seam stitch. Then knit five or six rows before narrowing again. The leg should be narrowed thus seven or eight times to form a good shaped leg.

No rules for length, or the number of stitches to be cast on a needle, can be given, as nearly every person differs in size. The only sure way is to measure by some old stocking. The heel must contain just half the stitches in the whole stocking. Take off the stitches, for the heel, on to one needle. A long heel makes a better shaped stocking than a short one. When nearly done, narrow five or six times on each side of the purl; for, in taking off the stiches for the heel, the purl stitch must be in the centre of the heel needle. The heel is knit backwards and forwards like a garter, only it is purled all across on the wrong side. The narrowing must all be done on the plain knitting side. Some persons knit the heel with double yarn; others, on the purling side, slip a stitch and knit a stitch all across, and the next time the purling side is knit, slip the stitch you *knit* before. This makes a strong heel, almost equal to running a heel after it is knit. To bind off the heel, you must place half the stitches on one needle and half on another, then place them side by side, and knit two stitches together with a third needle, slip the first stitch knit with the third needle over the second stitch all across, never leaving but one stitch on the needle. Some finish the heel dif-

ferently ; they take just half the stitches of the heel in the middle of the needle, leaving a quarter on one side and a quarter on the other, and only knit the middle, but each time take up one stitch from the side, and narrow it with one on the middle, until all the stitches on the side are gone.

The foot is formed by taking up the loops on each side of the heel (these loops are formed in knitting the heel, by always slipping the first stitch, as in a garter). In knitting round the first time, it is necessary to widen on the heel every third stitch, by taking up an additional loop. It should then be narrowed on the corner of the side needles, by narrowing two together of the four last stitches on the first needle, then on the other side needle knit two plain, slip a stitch and knit a stitch, and put the slipped stitch over the knitted stitch, until the foot is small enough. After the first few times around, it shapes the instep better to narrow, then knit around without slipping and binding. The next time knit past the narrowing side plain, and slip and bind, therefore the size is only lessened one stitch every row, forming a long gore. The toe is formed by narrowing at the beginning and end of each needle ; first knit two plain and narrow, then leave four at the end of the needle, narrow the first two, and knit the other two plain ; before narrowing, see that the stitches on each needle number the same. Knit around three times plain, then narrow as directed. Knit three plain rounds between the narrowing three times. Then knit twice around plain, three times between the narrowing ; then once, then narrow every time till there are only four stitches ; break off your yarn, leaving suf-

ficient to draw through the four stitches, and with a darning needle fasten it strong.

Another way to narrow a toe off, is to narrow every seven stitches when you begin the toe ; knit seven times around, and narrow every six stitches ; knit six rows and narrow every five stitches ; knit five rows and narrow every four stitches, so on to the end.

3.—BABY'S KNITTED JACKET.

CAST on two hundred stitches on good sized steel needles, knit quarter stitch eleven purls, that is twenty-two times across ; then, with colored split worsted, knit three purls, then narrow every time, putting the worsted twice over the needle each time to make holes ; knit three purls, then commence with the white worsted ; knit fourteen purls ; divide the stitches into three parts, fifty on each side, one hundred in the middle. Commence with the middle, knit twenty-two purls, then narrow each side of the needle every other time, making twenty-two purls, bind off. Knit the fronts the same way, narrowing only on one side.

SLEEVES.

Cast on sixty-five stitches, knit thirty-six purls, narrowing each side of the needle every eighth purl ; knit three purls with color, make holes, then three more purls, bind off fifty-four stitches, then sew up the shoulders, take up the stitches round the neck, knit the same with the colored worsted, as the border on the sleeves,

take up stitches down each side of the front, knit the same border, only have one purl before making the holes, then knit two purls.

BORDER.

Cast on eighteen stitches, and knit the same as border for blanket, making seven holes instead of four. *Split worsted is preferable.*

4.—BABY'S BLANKET.

COMMENCE with thirty stitches on a needle, and knit Brioche stitch. Knit till you can count twenty-four loops, then change the color (the stitch to be knit, is slip a stitch, put thread in front and narrow, all across, on both sides the same). You must always join the color on the same side, and have a colored square in each corner of your blanket. Knit seven squares in each strip, and seven strips form the inside of the blanket.

5.—BORDER TO BLANKET.

CAST on ten stitches, knit two plain, put your worsted in front and narrow all the rest, but knit the last stitch plain ; that is, put your thread in front and narrow two together, till there are two left ; then put your thread in front and knit one stitch ; then the last one plain ; knit back plain ; then knit three stitches, and the same as before, only add a stitch every other time across, till you have nineteen stitches ; then knit twice plain, and knit

eight, and narrow ; then put your thread in front and narrow four times ; knit last stitch plain always, knit back always plain ; decrease one every other time till you have ten, then knit a plain row to join your other color. All the scallops are knit the same, and it needs thirty-two blocks of edging to go round the blanket. The colored point of each corner must be gathered up to the point close, thus making the white come on each side of the colored square.

It takes eight ounces of common zephyr worsted, four ounces of each color.

This enlarged, makes very handsome carriage blankets, with a palm leaf worked in each square ; but instead of a knitted border, it is better to tie in a heavy fringe of worsted.

6.—KNITTED BED-QUILTS.

THIS requires a whole box of the red and white Saxony yarn.

This should be knit with the finest ivory needles. Cast on forty stitches. Knit the stripes garter stitch ; that is, knit backwards and forwards plain knitting, slipping always the first stitch on the needle. Knitting it thus, it makes every other time across look like purling. The stripes must be four hundred purls in length ; it needs eleven stripes, red and white alternately. These stripes must be sewed together, and the ends finished off with a fringe, or knit a border. The directions given for the border to the first baby's blanket, knit it broader by knitting six or seven stitches plain before you widen or narrow to make holes.

A "couvre-pied" can be knit in the same manner, only knit the stripes three hundred and ten purls in length.

7.—BABY'S BLANKET.

A BEAUTIFUL blanket can be knit with stripes, alternating pink and white. Knit plain garter stitch, each stripe a yard long; the white stripes should be the narrowest, eighteen stitches for the white and twenty-two for the pink. When finished, then work in the white stripes, a pink rose-bud and a green leaf, as small as possible, then sew all together, making the blanket a square yard.

BORDER.

Cast on sixteen stitches.

First row. Knit three, turn over twice, purl two together, knit two, turn over twice, knit two together, turn over twice, knit two together, knit five.

Second row. Knit seven, purl one, knit two, purl one, knit two, turn over twice, purl two together, knit three.

Third row. Knit three, turn over twice, purl two together, knit thirteen.

Fourth row. Knit thirteen, turn over twice, purl two together, knit three.

Fifth row. Knit three, turn over twice, purl two together, knit two, turn over twice, knit two together, turn over twice, knit two together, turn over twice, knit two together, knit five.

Sixth row. Knit seven, purl one, knit two, purl one,

knit three, purl one, knit two, turn over twice, purl two together, knit three.

Seventh row. Knit three, turn over twice, purl two together, knit six, turn.

Eighth row. Cast off five, knit ten, turn over twice, purl two together, knit three.

8.—SOFA CUSHION.

CAST by knitting sixteen stitches, knit plain four rows like a garter, knit eight stitches, turn and purl four, knitting heel stitch (that is, plain in front, and purl on the back side), ten times on the four stitches. Then slip the four stitches from the needle while you take up the next four, then return them again and knit the remaining four, turn and knit twelve stitches, then take up the last loop on the roll, and narrow it off with the first stitch of the last four, then knit the last three plain. Then knit four rows plain (which makes three rows of purling on the right side between each roll). Now commence another roll, same as before. It takes seven ounces of tapestry worsted, or double zephyr, one ounce to a stripe. Be careful and select colors that will harmonize together.

9.—TABLE MATS.

TABLE mats, made of coarse white tidy yarn—with the plain crochet stitch and a scallop border—are easily worked, and do not strain the eyes

10.—CARRIAGE OR BED-ROOM MAT.

A VERY pretty carriage or bed-room mat may be made in knitting. Collect as much flannel list, or flannel and woollen cloth as you can ; cut it into short lengths, and knit a few rows, for a foundation, in twine. Then take a piece of list, put it across the string, and knit it in tightly ; knit the pieces of list in this way all across ; then knit a row plain ; then knit in a row with the list. If you knit an edge of scarlet flannel, say six rows first, and six stitches at the beginning and end of each row, of pieces of the scarlet, and six rows of scarlet at the ending, your mat will be improved, particularly if the centre is knit entirely of gray list, as the gray and scarlet are very effective. When completed, line it with a nice coarse brown cloth. Pretty mats can be knit entirely of old pieces of cloth of any kind, by cutting it in narrow strips and sewing each strip together ; knit it with large needles either in strips or squares, and sew them firmly together ; take your pieces at odd times and strip them up, and as you sew them together, roll them into balls ready for knitting, then arrange your colors to harmonize together.

11.—KNITTED MOSS.

CAST on about fifty stitches of light green Berlin wool ; slip a stitch on your needle without knitting, and knit the next row. Continue the same until you have finished two skeins of wool, taking care never to knit the first stitch of each line. Then knit on it, in the same manner,

two skeins of the next shade darker of color, and continue in the same manner until you have knitted up five shades of green ; join on a rich brown, and a faded moss-colored wool, and then cast off. Wet your knitting through with clear water, then dry it over a furnace register, or cover it with a paper or cloth, and press it with a hot iron. Let it remain for a few hours untouched, then unfasten the last stitch, and pull it out. It will unravel easily, from the first stitch of each row not having been knitted, and you will have a good curling imitation of moss to sew on to baskets or for borders of mats.

12.—PLAIN NEEDLE-WORK, AND USEFUL HINTS FOR YOUNG LADIES.

OUR young ladies formerly were educated thoroughly in needle-work. Plain sewing was taught in the primary schools ; but, alas ! these times seem past ; it is rare to find a little girl of even ten years old who can hem a pocket-handkerchief well. The children of our mechanics grow up with but little knowledge of useful work. Their mothers, with mistaken love, mend, dress, and make their wearing apparel. Often they marry wholly ignorant of the accomplishments *necessary* for a true wife and helpmeet—that is, the knowledge of house-keeping, plain sewing, and cutting out the simplest garment.

Who is to blame for this ? The excuse of many a hard-working mother is, “ I have not had time to teach my daughters ; ” and of our ladies of wealth, “ I did not

suppose my daughters would ever be poor, or require such knowledge!"

It is a very great pity sewing is not taught in our common schools. It is quite as important to our girls as reading, writing, spelling, &c. There is no country in the world where a *practical* education is so necessary as in ours, the fluctuations of fortune are so great. The rich man of to-day may be the poor man of to-morrow. Therefore every boy and girl in the land should have a useful and practical education. Our girls especially, rich or poor, need a knowledge of practical housekeeping; it is not possible for any lady to be a good housekeeper unless she knows how things should be done herself, as a trained servant in our free country is rarely found.

Plain sewing is also very important to be learned in early youth. In these days of machinery much of the old plain work is done by the swift needle of the sewing machine, rather than by hand; and it is expected, by and by, that hemming, stitching, over-hand work, and gathering will be as much forgotten as the old tambour stitch and embroidery of our ancestors. But we maintain that a person to work well on a machine should first be taught to sew well, and it is quite possible work may be required when no machine is to be hired. If young ladies are always able to hire their sewing, it may be pleasant to work for the poor. We hope our young readers may be induced, of their *own* desire, to become *good sempstresses*. If any one reading this book is induced to obtain *practical* knowledge on the subject, we shall feel repaid, and we would gladly hear from them. We will now give a few directions as an assistance, at

the same time begging our young readers to remember that one lesson from a good sempstress is worth a dozen pages of print.

A hem should be, generally, narrow and very even ; if it is to be wide, cut a measure the desired width, and be careful to have it exact ; the stitches should be taken through, but so small as to be nearly invisible. A hem on clear muslin will look neater if it is finely *run* like the seam of a dress.

In over-hand sewing the stitches should be taken on the edge of the two sides, and should lay quite close to each other, so as to look like purling.

In stitching you should only take up two threads, both behind and before the needle.

Gathering is done on the needle, two threads taken up and four left, and the line should be kept very straight by a thread, if possible. The gathers, when finished, are drawn very tightly together on the thread, and stroked down smoothly with a strong needle or pin.

Darning is done by taking every other thread (in a stocking), and leaving a long loop at the end of each line. The darn is crossed by taking every other thread alternately, each way. It used to be called "weaving." If muslin is to be darned, it is better to use ravelings of the same instead of thread.

Should you have a rent in a dress to repair, use ravelings of the same material ; they are easily to be obtained from the turning in of the top of the skirt, if you have no pieces ; but generally some are left by the dressmaker, and should be kept for such accidents. In mending by piecing, be careful that you do it very neatly ; match

stripes or patterns on the material artfully, and you will have the triumph of preventing the defacement of your dress.

Learn how to make and trim a bonnet, or make a graceful bow of ribbon. Young ladies of small means, who are ingenious and tasteful, often present a better appearance by making things for themselves, than those who, without taste or neatness, spend large sums at the milliners'. We advise you to try and make your own dresses.

In order to do this, rip up an old dress that fits you; lay the several portions of the body on a large sheet of brown paper, with the turnings *turned in*; trace the pattern carefully with a black pencil; then draw a line round the whole, including the turnings-in, and cut it out. Pin this pattern on your material, and cut out the dress, taking care that you do not get two fronts for the same side, if there is a right and wrong surface to it. To prevent the possibility of this mistake, it is well to fold the material and cut both at once. The same may be said with regard to the side bodies. Greater skill is required to put the skirt into a band, than in making a body, in order that it may hang gracefully; but as fashions change continually, we can only advise you to get a good pattern to copy from, and *care* and *patience* will insure you success. If your means render it unnecessary or not expedient for you to make your own dresses, you will find it pleasant to be able to make up the cotton dress you destine for some poor neighbor, whose want of time for needle-work will render her as much obliged for the *labor* bestowed, as for the material itself. Making clothes for poor children is *active charity*.

We know of a young lady so naturally industrious, that at the age of six years, she made entirely every part of a day shirt for her father. It is not as likely, at the present day, that your labors will be required for shirt-making for your male relatives; they generally prefer buying their linen ready made. Every *woman* ought to know how to put one together.

Any child or young lady who can make a shirt well, can easily manufacture all female undergarments; patterns for cutting out will be all that will be required. Both cotton and linen cloth should be scalded in *soap-suds*, dried and pressed *without* rinsing, before you work on them, in order to render them soft enough for the needle to pass through easily. But should you be unable to have this done, rub the parts you are going to sew or hem with a cake of white soap, or make a strong suds and brush the parts. Your needle will move easily, and will run no risk of breaking.

We advise young ladies who have the care of their own linen, and perhaps have their own allowance for dress, to take a few hours on one fixed day, weekly, to look over their clothes, and make any small repairs that may be wanted. They will find the truth of the old adage, — “A stitch in time saves nine,” — and will make their linen last as long again as it would otherwise do. Gloves should be neatly mended, and no rip suffered to remain a day. White and light-colored gloves can be nicely cleaned by rubbing them with a flannel dipped in milk and white hard soap. When dry they will need to be pulled till they are soft and in shape.

Cultivate, we beseech of you, habits of neatness in

early youth. Dresses should never be put away dirty, or with spots that can be removed, or thrown down in a heap. Benzine or chloroform will remove nearly all kinds of spots, but it must be quickly rubbed dry, or it will leave a spot. Wax spots from candles can be removed from any material by placing over the spot some brown or blotting paper, and place over it an iron sufficiently hot to melt the grease; change the paper until all the grease is thus absorbed.

Our young readers may be assured that the little care bestowed on keeping their garments neat, clean, and whole, will give to their appearance that air of freshness which in itself is a charm, and will prove the truest economy. Moreover, the power of using the needle skilfully will give good manipulation for other and more artistic employments, and can never be aught but a blessing to the American girl.

13.—EMBROIDERY IN SPANGLES AND CANNETILLE.

BULLION, which is a large gold wire, of which officers' epaulets are made, *frisure*, a smaller bullion, *clancquant*, which is a flat gold ribbon, are all classed under the denomination of cannetille. Leaf-shaped spangles are called laine.

Stretch the velvet, cloth, or silk which you intend to embroider in a frame, and tack over it your pattern, which must be nicely drawn on silver paper. Suppose your pattern is a wreath of grape-vine leaves and grapes;

you must put bullion on for the centre stem. This is done by running a needle and thread through the tube, and fastening it with an occasional (strongly sewn) stitch or two. Take the smaller bullion, or frisure, for the outlines of the leaves and tendrils, fastening it on in the same manner as the large bullion ; vein the leaves with fine gold thread.

Make your grapes of large spangles, and purple or green glass beads, thus : Pass your needle through the velvet from underneath, take a spangle on it, then take a purple bead ; pass your needle again through the spangle and back through the velvet. Then begin another grape in the same way, and fasten carefully off when your silk is used up. A wreath of grapes and holly (the holly berries red beads) round the edge of a table cover would look very nice. The cover should be of dark cloth, and edged with gold cord all around.

14.—EMBROIDERY IN LAMÉ OF VELVET AND GOLD.

FIX your material in a frame. Tack over it your pattern drawn on silver paper, or sketch it lightly on the surface of the cloth or silk.

Work your stems and tendrils in frisure, your berries or little flowers in spangles.

You can purchase stamped velvet leaves, which you must fasten with strong gum to your velvet or silk, and then keep them firm by veining them with gold thread.

Petals of flowers may be cut out of colored velvet, and arranged on the cloth or velvet, if the young needle-woman has sufficient taste to form a flower.

The work may be done entirely of cachemire and gold on cloth, if a more expensive material is beyond the worker's means.

15.—EMBROIDERY IN FEATHERS.

STRETCH your material for the ground on a frame. Cover the back or under side of your feathers with thin gum, to keep the tiny plumage together, and let them dry. Take a sharp pair of scissors, and cut the feathers into the shape of the petals you require; lay them separately on your pattern, and tack them firmly on the silk or cloth with sewing silk of the same color. Work stems, tendrils, and centres with silk of the color required. Of course you must arrange your petals or leaves according to your pattern.

Any white feathers dyed are suitable for this work.

16.—CORK WORK.

VERY beautiful articles can be made by ingenious boys and girls, from cork bark. Those of our readers who have only seen cork work in the shape of common bottle corks, will not be attracted by the title of this chapter. But all who have seen, either at home or abroad, the exquisite models of castles, old ruins, churches, and many other picturesque objects, made entirely from this material, will welcome a few simple directions for this work.

We will first speak of the cork bark, as it may not be generally known that cork is not indigenous, but is the soft, elastic bark of a species of oak tree, that grows abundantly in the northern part of France, Spain, and Italy. When the tree is fifteen years old the barking is commenced, and is repeated at intervals of eight years, the bark improving with every operation. The cork is stripped from the tree in July and August; it is then piled up in water under heavy stones, to flatten it, after which it is fire dried, and packed in bales for exportation. The cork cutters divide the sheets of cork in narrow strips, and after cutting them the proper length, round them with a thin, sharp-bladed knife into a cylindrical form. The cork tree and uses of its bark were known to the Greeks and Romans.

Cork bark can be obtained at any of the numerous cork factories; it is not expensive, and the refuse bark can be used in making many pretty models.

The beginner should select the simplest subjects for his first work, such as a rustic cottage, bridge, or simple ruins.

When a certain amount of proficiency has been attained, it will be easy to advance to higher themes, until the most elaborate designs may be attempted without fear of failure.

In this art, models or pictures, with some description of the proportions, are sufficient guides.

In this work no tools are required except a sharp pen-knife and a glue-pot.

The walls of buildings must be cut from the cork block. The proper thickness for the cork used in mak-

ing walls is about one half, or even one quarter of an inch, and the smoothest cork should always be selected for this work.

When the required size has been obtained, square it smoothly to the shape called for, making the two side walls exactly alike. Next mark with a black lead pencil the shapes of the windows, doors, &c. Then cut the windows with a penknife, making the opening smaller on the inner side, but slanting outwardly, especially in the sill the slope is very considerable, and in gothic windows should never be flat or square. The waste and refuse pieces of common cork will all be of use in making the trimmings and ornamental work. For the mouldings around the windows, cut small rims of cork, like your model, and glue them on at proper distances from the outer edges. Thin sheets of mica glued on the inside of the windows, are excellent substitutes for glass; the appearance of stained glass can be given by gumming paper of the color you desire to represent, on the inside, over the mica. All ornaments can be formed of tiny shavings of cork. The gables, doors, &c., are prepared as the model may require. The most suitable base, on which to glue your building, is a board covered with green cloth or baize. The four walls can now be glued together and placed on the green cloth board. If not firm, small splints of wood, shaved so as to fit into the inner corners, will strengthen the edifice. The roof comes next, and can be made of smooth seasoned wood, about a sixteenth of an inch thick.

Cut the board large enough to extend well over the edges, so as to form eaves; glue one side firmly along

the gable ends, then fit the peak of the other side. A roof with a high pitch adds much to the tasteful appearance of a rustic church. If there is to be a steeple, or spire, the tower, or base of the building should be formed of small pieces, cut so as to fit the slopes of the roof, and built as a mason joins bricks or square blocks in a wall. When the base is formed square and flat on top, the tapering spire should start from this foundation, with a round, or eight-sided piece of cork, whose four opposite sides are exactly the size of the square base on which it is to be glued; on this place another cork a trifle smaller; this in turn will be covered with another still less; so on until it tapers to a point.

Common bottle corks, of various sizes, are best to use for spires and columns.

The best way to make spires or columns, is to glue them in proper shape separately from the building; when all are joined, shave them carefully, so as to form the proper slope for the spire, and the columns can be cut with a knife to imitate fluted sides, or in any desirable way. When they are finished, glue them in the proper place on your buildings.

The outside ornaments, such as a cross or vane for the point of the spire, the caps of the columns, the buttresses, eaves, moulding around the doors, porches over the entrance, cornices, &c., may now be added. The roof may be colored with a little vandyke brown or burned umber, mixed either in turpentine or oil; a single coat will be sufficient, and if a rough appearance is desired, dust some fine sand over it before the paint is dry.

If you glue moss on to the base board, it adds to the

natural appearance of the building. If you design to represent a ruin, or Gothic church, a little green moss, neatly gummed on to represent ivy and other creeping vines, is an improvement. Time adds grace to all ruins, by its moss and vines, planted by divine Providence.

Landscapes, in the picture style, are often designed with cork ; the finest shavings of cork can be used to cut into shapes to represent a castle, a light-house with rocks near by, a bridge, or whatever else may be selected to form the design. Some idea of perspective drawing will be necessary in this work ; the object should be arranged and fastened with gum arabic on to a piece of white card-board, and the sky slightly tinted in water-colors for a back ground. Irregular edges increase the resemblance to distant hills, and sharp edges of thicker cork represent the objects in the foreground.

There is no attempt to imitate nature in the variety of color, for the picture wears the sombre shade of cork, but the general effect is pleasing ; the light background, seen through the thin shavings of cork, give a good idea of brown autumnal forests.

Crosses to train ivy on can be made of cork.

We trust our readers will be induced to try this cork work. It is often difficult to know what to make for fairs or for Christmas presents. This work in our country is rarely seen, and it would sell well, or prove a pretty present, if neatly done ; but, like all things worth doing, it requires time, practice, and patience to insure perfect success.

17.—BLACK LANDSCAPE.

PASS a card, or a piece of card-board, through the smoke of a candle till it is quite black.

Then take a penknife and scratch upon it any landscape or design you please.

Moonlight scenery is very effective in this way. In case of lack of pencils, &c., this is not a bad way of sketching a scene one desires to remember.

18.—VEGETABLE FLOWERS.

Boys and girls who live in the country will find it a pleasant winter evening pastime to make a bouquet of vegetable flowers.

First gather from the woods laurel leaves and other evergreens. Then by the exercise of taste, ingenuity, and a skilful use of the penknife, really beautiful bouquets can be compiled of these flowers, with the addition of sprigs of evergreen. White turnips, yellow turnips, beets, carrots, pumpkins, and portions of cabbages, can be used for the flowers.

Take a white turnip, neatly peeled, notched exactly down in leaf shape all round. Then fasten to a stem whittled from wood. Surround it with green leaves, and behold either an exquisite white camellia or a rose! Moss rose buds can be made by cutting turnips or beets into the proper shape, and placing real moss around them. Red roses, camellias, or dahlias can be made in

the same way from beets. Yellow flowers from carrots and pumpkins. White or red flowers from white and red cabbages.

Beautify your houses, however poor or humble your lot; a bare, comfortless room does not excite home love.

19.—ORNAMENTAL SEED WORK.

WE have seen exhibited at agricultural fairs some really beautiful frames and boxes ornamented with common garden seeds.

If our boys and girls will begin early in the summer, and collect every variety of seed possible, such as all kinds of beans, corn, melons, &c., they will have abundant material for this kind of ornamental work in the winter.

Every seed of size sufficient for handling should be saved; even small polished black or yellow seeds, like poppy seed, can be preserved to scatter over the ground-work. Dry all the seeds carefully, and place them in boxes ready for use. This work can be applied with excellent effect in ornamenting boxes, picture frames, hanging baskets, book racks, flower stands, small tables, brackets, &c. Get the frame of wood, of any article you intend to ornament with seed work; stain the wood with walnut staining materials, or varnish with asphaltum varnish. It is not desirable to have a high polish on the surface intended to be ornamented, as the glue will not adhere to a very smooth substance. Keep your wood-work in some dry place, until you are ready to glue on the seeds.

When you have a leisure day or evening, place your frame of wood before you, and the boxes of seeds around it. When your glue is hot, spread a little over a small space with a brush, and arrange your seeds in the form of some flower or other figure.

It is difficult to give explicit rules for the work. It is best for each person to exercise his or her taste and ingenuity in arranging the designs. As the work proceeds, an endless variety of shapes and styles of designs will suggest themselves.

An accurate resemblance to nature is not easily attainable in this kind of work.

When all the ornamental work is arranged, the small spaces left uncovered should be brushed over with a thin coat of varnish, and sprinkled with any small seeds. Black seeds are very desirable, as they form a good ground-work, and afford a proper relief to the designs. When the glue has become hard, apply to the whole work an even coat of copal varnish. If this is not sufficient, apply another coat; it is needed, as some seeds absorb more than others.

20.—HOW TO IMPRESS LEAVES ON VELVET.

THIS work is very easy and very pretty, requiring only great nicety and care, and some taste. Take a piece of white cotton velvet (such as undertakers use as a lining to burial caskets), white jean, or white linen, or fine, thin muslin; cut it out in the form of a tidy,

mat, or whatever you wish to make. Then pin upon it carefully, with very minute pins, Ferns, Maiden's Hair, or any graceful leaf, in the form of a wreath or bouquet.

Mix plenty of India ink the depth of color you require; take a fine comb and brush; dip the brush in the ink and pass it over the comb, thus splashing the ink all over your material until it is quite black. Let it dry thoroughly, and then unpin your flower; you will find its form left in white on the velvet or linen. Mark, with a fine brush, the veins and stems in it, and your work will be ready to make up as required.

All delicate leaves should be carefully pressed till dry before using them for this work.

21.—PAPER PILLOW.

SAVE all your scraps of writing paper, old notes of no use, old envelopes, old backs of notes, &c. Take a bag or some box to throw them in, instead of the fire or rag-bag, where they are usually placed. When a number has been collected, cut them into strips about half an inch wide or narrower, and two inches long; curl them wet by drawing them over the blade of an old penknife.

Make a pillow case of any material you have; fill it with your curled paper; mix with it a few shreds of old flannel.

Stuff it *quite full*; sew the end up, and cover it as you please. These pillows are invaluable in case of fevers, as they keep cool, and are cheap and good substitutes

for feather pillows. If these pillows are not required for home use, our young ladies could make them for our hospitals, or the poor.

22.—IMITATION CARVED IVORY.

TAKE half an ounce of isinglass, boiled gently in half a pint of water, till dissolved; then strain it, and add flake white, finely powdered, till it is as white as cream.

Take any article you desire to look like ivory, such as a wooden box, stand, or card-case.

Give the article three or four coats of this solution, letting each dry before the other is laid on; then smooth it carefully with a bit of damp rag.

When the composition is perfectly dry, you can put on the imitation carved ivory figures, which are made as follows: Boil half a pound of best rice in one quart of water, till the grains are soft enough to bruise into a paste; when cold mix it with starch powder till you make it as stiff as dough; roll it out about as thick as a shilling. Cut it into pieces two inches square, and let it dry before a moderate fire. These cakes will keep many months, and be fit for use, if kept dry and free from dust.

When required for use, get a coarse cloth, make it thoroughly wet, then squeeze out the water and put it on a large dish four times double; place the rice cakes in rows between this damp cloth, and when sufficiently soft to knead into the consistency of new bread, make it into a small lump; if too wet, mix with it more starch pow-

der, but it must be sufficiently kneaded to lose all appearance of this powder before you take the impression ; to do which, you must procure some gutta percha half an inch thick, cut it into pieces about two inches square, and soften it in hot water ; then get any real carved ivory you can, and take off the impression on your pieces of gutta percha, by pressing it carefully upon the carved ivory till a deep impression is taken.

When the moulds are quite dry and hard, and your paste in a proper state, with a camel's hair brush lightly touch with sweet oil the inside of the mould you are going to use, and then press the rice paste into it ; if the impression is quite correct on removing it, take a thin, sharp, small dinner knife and cut the paste smoothly, just so as to leave all the impression perfect ; then with a sharp-pointed penknife smooth off all the rough edges, and with white cement place your figures on the box in large or small figures, just as your taste directs ; the figures adhere better if put on before they are quite dry.

Sometimes, from frequent kneading, the paste gets discolored ; these pieces should be set aside and used separately, as they can be painted in water colors to resemble tortoise shell or carved oak ; this should be done after being fastened to the box.

Having completed your work, finish by varnishing it very carefully with ivory varnish, which should be almost colorless.

This design so nearly resembles carved ivory, that it has been mistaken for it when nicely done, and it is very strong if carefully cemented.

Cover boxes simply with the flake white solution, and

then paint on them in water colors representations of flowers, varnishing when dry with colorless varnish. Such boxes are very easily made.

From the readiness with which the material can be obtained, this is an elegant amusement for all who are of an ingenious disposition.

23.—DIAPHANIE, OR STAINED GLASS.

THIS simple, but really beautiful invention, can easily be acquired by carefully reading the following directions, and by practice, the effect of gorgeous stained glass can be given to common window glass, with moderate expense. The materials required are plates of clear glass, free from specks or bubbles, designs, groundings, and borderings which are printed expressly for the purpose, and in transparent colors; a roller which is employed to press the paper closely on the glass, so as to remove the bubbles of air; transfer varnish, to fasten the prints upon the glass; clearing liquid, which is used after the paper has been removed, to render the work transparent and brilliant; the washable varnish, which protects the designs from damps, and renders them capable of being cleaned; and three camel's hair brushes to apply the varnish, &c. There are three hundred sheets of designs published for this work, consisting of subjects, borderings, and groundings.

A window generally consists of parts of several sheets, as it should contain a medallion or subject, a border, and the whole of the remaining space filled up with grounding

paper. Among some of the best subjects, we may mention "The Virgin and Child." "The four Evangelists with architectural niches." "The Adoration of the Magi, with architectural borders." "St. Peter and St. Paul." "The Annunciation." "St. John the Baptist." "St. Joseph." "Mater Admirabilis." "Adoration of the Magi." "Boar hunt." "Deer reposing." "Two marine views." "The Laborer's Return." "Winter scenes," &c. For these suitable groundings and borderings must be selected according to the taste of the worker, who must, however, remember that the beauty of the work depends upon perfect harmony in coloring and design.

The materials being all collected, thoroughly cleanse and dry your sheet of glass, and lay it flat upon a folded cloth. Then cut out the medallion, or subject (unless the paper is to be applied in one piece), and fasten it to the glass by thoroughly damping it on the wrong side with a wet sponge, giving it a plentiful coating of transfer varnish on the printed side, laying it face downwards upon the glass, and firmly pressing it down with the roller, commencing at the centre, and gradually passing over the edges.

The border must be the next fixed. Then damp the printed side of the grounding paper, and lay it over; raise one end of the glass, so that the light passing through will enable you to see the position of the subject and border. Trace round them carefully with a pencil, remove the grounding paper, and cut it out a little within the line, so that the ground may slightly overlap the subject; give the coating of varnish, and apply it to the glass, as before described, pressing it down with the roller, so that no blisters are to be seen.

Take care to keep the back of the papers damp during this operation, and when it is finished wash them over with the sponge and water. It is well to interpose a piece of damp paper between the roller and the design, as this prevents the varnish adhering to it. The work now requires to be left for four-and-twenty hours, so that the varnish may become dry and hard ; it is then ready for the next operation — rubbing off the paper. This is done by wetting and rubbing in a circular direction, with a sponge or the hand.

After this the work again must be allowed to dry ; after which rub it with the hand so as to remove all loose particles, and give it a coating of the clearing liquid, which should be laid on with a flat brush. After again remaining for a day to harden, the washable varnish is applied, and the work is completed.

If these directions are carefully followed, a perfect transparency will be produced, which it will require an experienced eye to detect from real stained glass.

Transparencies in thin silk or muslin can be made by tightly stretching the material on to a frame. The designs are then subjected to two coatings of the clearing liquid applied on the wrong side, and when dry, one of the transfer varnish to the colored side. This is then well pressed down by the roller. When quite dry, if the picture appear at all cloudy, it will be necessary to apply the clearing liquid again, then varnish, and the transparency is finished. Be careful, however, not to remove the work from the frame until perfectly dry. This work is especially adapted for hall windows, by the side of the front door, or in the door.

We have seen beautiful specimens of this work done by a twelve-year-old miss.

24.—PAINTING ON GLASS.

SOME of the works which profess to teach the art of painting on glass, contain directions for staining large windows in churches and halls; others merely give the process of producing the more common paintings, such as are carried about the streets for sale. These seem to have been much in vogue about a century since, as all the "Young Artists' Assistants" of that day contain the mode of painting them. They direct us to fix a mezzotinto print upon the back of a sheet of glass, and to remove the paper by wetting and rubbing, leaving the impression of the print, which is afterwards to be painted in broadwashes, the ink of the print giving the shadows. The picture being then turned over, the glazed side becomes the front, and the colors first laid on, are, of course, nearest the eye. This mode of painting resembles the style of Grecian painting, that being painted from the back, and the shading is the ink of the engraving.

The methods by which glass is stained are scientific; they require some knowledge of chemistry, and such apparatus as must preclude the practice of this branch of art as an amusement. It may be interesting, however, to know something of the process. The glass being at first colorless, a drawing is made upon it, and the painting is laid on with mineral substances, the vehicle being a volatile oil, which soon evaporates. The

sheets of glass are then exposed to a powerful heat, until they are so far melted that they receive the colors into their own substances. Enamel painting is done on the same principle. This is a time of great anxiety to the artist, as with all possible care valuable paintings, both in glass and enamel, are frequently spoiled in the proving, or vitrification. The art seems to have been lost during several centuries; but it has of late been successfully revived; and large windows have been executed for churches and Gothic halls, which almost vie with the fine old specimens in the cathedrals in point of color, while they far excel them in other respects.

The branch of the art which may be treated as an accomplishment, is the decoration of glass, flower-stands, lamp-shades, and similar articles, with light and elegant designs. Flowers, birds, butterflies, and pleasing landscapes afford an extensive range of subjects, which are suitable to this style of ornamental painting. The glasses may be procured ready ground. The outline may be sketched in with a black lead pencil; the lead can be washed off with a sponge when the colors are dry. The whole of the colors employed must be transparent, and ground in oil; opaque, or body colors, will not answer the purpose.

They may be purchased in small bladders, only requiring to be tempered with fine copal or mastic varnish, and a very little nut oil, to be ready for use. Blue is produced by Prussian blue; red, by scarlet or crimson lake; yellow, by yellow lake or gamboge; green, by verdigris, or mineral green, or a mixture of Prussian blue and gamboge; purple, by a mixture of lake and Prussian

blue; reddish brown, by burnt sienna; and all the other tints may be obtained by combinations; for white, or such parts as are required to be transparent, without color, the varnish only should be employed. A very chaste and pleasing effect may be produced by painting the whole design in varnish, without color.

It is an advantage to this style of painting that but few colors are required; as from the nature of the subjects, and their purpose as ornaments, brilliancy is more desirable than a nice gradation of tints. The work must, of course, be carefully dried, but may afterwards be cleaned with a sponge and cold water.

25.—PAINTING ON VELVET.

PAINTING on velvet as well as on glass is an old art revived. No art that is really beautiful in itself will pass away entirely. As these paintings are very pleasing to the eye, and easy of execution, it is well to know how to paint them. The following directions are taken from a reliable English work.

The colors for this style of painting are sold at the drawing material warehouses in a liquid state, and prepared for use. In addition to these, a brilliant rose-color is obtained from the pink saucers, by dropping a little weak gum water upon the color, and rubbing it with a brush. A deep yellow may also be produced by pouring a few drops of boiling water upon a small quantity of hay saffron.

It is necessary to mix gum water with all the colors

made, to prevent their spreading into each other ; gum dragon is the best for this purpose. The brushes used are called scrubs ; they consist of a small stick, with a camel's-hair brush cut off quite short at one end, and at the other, a brush of bristles of a much harder description. A small box of black lead is necessary, and a piece of list rolled tightly round, to the diameter of about two inches, to be used as a sort of brush with the black lead, for making outlines in the manner we shall presently direct. A piece of linen rag, to wipe the brushes on, should also be provided.

The most brilliant flowers, fruits, shells, birds, &c., are well adapted to this style of painting. The outline of the subject may be sketched in pencil on the velvet, which is of such a very delicate nature, that the greatest nicety is necessary to keep it in a state of neatness. Care should also be taken that the sketch is correctly made, as an error cannot be effaced by rubbing out, as on paper. It is a safer method, however, to make the sketch on drawing-paper, and to prick the outline very closely with a fine needle ; then, the velvet being previously nailed on a flat piece of wood of a proper size, the pricked pattern may be laid over it, the roll of list dipped into the black lead powder, and rubbed regularly over the pattern from side to side ; be careful to touch every part, and on removing the pattern, a perfect outline in black dots will appear on the velvet.

Where a set of articles of the same pattern is undertaken, this is a very good plan, as it insures accuracy, and saves the trouble of making separate sketches.

Even those who have no knowledge of drawing on

paper, may produce a design on velvet with ease and correctness, by tracing off against a window, or by means of tracing paper, any drawing or print which they wish to copy, and pricking the tracing on the velvet in the manner just described. In order to keep the margin of the velvet from being soiled in the progress of painting, a piece of thick paper should be laid over the whole, and an aperture cut in the middle, sufficiently large to expose the part to be worked on. Each brush should be kept for that color alone, to which it has once been appropriated.

A small quantity of the color about to be used should be poured into a little cup, and a drop of gum-water added, and stirred with the stick of a pencil prior to its being taken on the brush. The mode of its application is so simple, that a short description of the execution of a single flower will suffice to give an idea of the process of painting almost any other subject on velvet. A very small portion of color is to be taken upon the brush, and the darkest part of the leaf touched with it; the brush is then to be dipped in water, and the color gradually softened to the edge; each leaf ought to be colored separately, and the darkest parts in the centre of the flowers may be finished with a small brush without softening. India ink is used to make the dark shadows of crimson flowers. The veins, and all the petals of flowers, and all the fine lines, should be done with a pen. Each leaf, as it is shadowed, should be brushed with the hard end of a brush that way of the velvet in which the pile runs most easily, and then in the contrary direction, so as to set it up again to become dry. A deeper shade

should never be added to a leaf or flower until the color previously laid on is perfectly set, or the two colors will spread, and run into each other ; this will be prevented by the gum, if sufficient time can be allowed for each shade to dry before a subsequent one is applied.

When the piece is finished, and quite dry, it should be brushed over with a small, round brush, about two inches in diameter, with hard bristles of an equal length, to raise up such parts of the pile as may have been flattened in the process of painting.

Toilet sets, sofa cushions, fancy tables, pincushions, and a variety of articles may be ornamented in this way.

26.—CASTING IN PLASTER, SULPHUR, &c.

TAKING the impression of coins, metals, &c., is, independently of its utility, a most interesting amusement. This art is of considerable importance to collectors of antique coins, &c. It is often difficult and always expensive to purchase superior specimens, of which, however, exact models may be obtained by casting, without the slightest injury to the originals. The mould is made in the following manner :—

Take a strip of paper, a quarter or third of an inch wide ; roll it twice tight around the rim of the coin or gem, of which a cast is intended to be taken, and fasten the end with very stiff gum-water, which will hold it instantly. Rub a very little oil, with a camel's-hair pencil, over the coin, in order to prevent the plaster from sticking ; then mix some fine plaster of Paris, with as much

water as will make it almost as thick as treacle ; apply it quickly to the coin, on which it will be held by the paper rim. It sets almost instantly, and may be taken off in a few hours ; but the longer it remains undisturbed the better. The mould which is thus obtained is the reverse of the coin ; that is, the impression is concave, like a seal. When the moulds are so dry that they will not wrinkle a piece of paper laid flat upon the surface, let them be well saturated with the best boiled linseed oil, placing the moulds with their surface upward, that the whole of the oil may be absorbed. They must be covered from dust, and nothing should touch their surface, lest they suffer injury. Moulds, well prepared in this manner, and dried about two days after being oiled, will stand a long time for the casting of either plaster or sulphur. When used, either Florence oil or a little hog's lard (the latter to be preferred) should be applied very tenderly over the mould with a little of the finest cotton wool, and the cotton wool, without lard, afterwards passed lightly over the surface, to leave as little as possible of the unctuous matter upon the mould, that the casts may be the finer. Put paper around them, as was before done to the coin ; pour on plaster in the same manner, and a facsimile of the original will be produced.

Good casts may be made of sulphur, melted in an iron ladel, either pure, or colored with a little red lead or vermillion, powdered and stirred up with it. The moulds and casts are made in the same manner as with plaster of Paris, only that the sulphur must be poured on the mould when hot, and water, instead of oil, must be used, to prevent adhesion. Sulphur makes the best moulds for

plaster casts, and *vice versa*—as similar substances can seldom be prevented, by either water or oil, from adhering, in some degree, to each other. Plaster cannot be used twice; that is, old or spoiled casts cannot be powdered and again employed; for the moment the material is moistened, being a species of lime, it is no longer plaster without being reburnt.

Another way of making casts of almost any color, is with a strong solution of isinglass; it must be used when quite hot; and it is so thin that a box, exactly fitting the rim of the coin, is required, otherwise it will escape. It may be colored with saffron, wood, &c.

Very beautiful impressions may be taken by pouring melted wax upon the metal, which comes off easily when the wax and metal are perfectly cold; but any one attempting this had better try it first upon a penny, or other coin of little value.

Impressions may also be taken in wax, which, for this purpose, should be rendered pliable by kneading it with the hand before the fire, a little oil having been previously mixed with it. When softened to about the consistency of putty, lay it and press it close down on the coin, the form of which will then be perfectly obtained.

The following is another mode of taking impressions: Procure tin or lead foil as thin as possible, place it on the coin, and with a pin's head, or any small, smooth instrument, work it into every part; then take it off, revert it into a shallow box, and pour plaster into its concave side; a durable plaster cast is thus obtained, covered with tin foil, which will resemble silver.

27.—ENGRAVED BOXES.

THE box should be white or light straw-color, in order to show the faint impression to advantage. It should be varnished five or six times in succession, and suffered to dry thoroughly each time. While the last coat of varnish is yet so fresh that your finger will adhere to it, the engraving must be put on, the picture side next to the varnish. The engraving must be prepared in the following manner :—

All the white paper must be cut off close to the edges of the engraving, which must be laid on a clean table, with the picture downward, and moistened all over with a clean sponge. It must then be placed between two leaves of blotting paper, to dry it a little. Before putting it on the box, take great care to have it even, and determine exactly where you wish it to be. Lay one edge of the print, picture downward, upon the varnish, and gradually drop it to its place, passing the hand successively over the back of the print in such a manner as to drive out all the air, and prevent the formation of blisters. Then carefully touch it all over with a linen cloth, so as to be sure every part adheres to the varnish. Leave it until it is thoroughly dry. Then moisten the back of the engraving with a clean sponge, and rub it lightly backward and forward with the fingers, so as to remove the moistened paper in small rolls. When the picture begins to appear, take great care lest you rub through, and take off some of the impression. As soon as you perceive there is danger of this, leave it to dry.

In drying, the engraving will disappear, because it is still covered by a slight film of paper. You might think it mere white paper; but give it a coat of varnish, and it will become quite transparent. Should you by accident have removed any part of the engraving, touch it with India ink and gum-water, in order that no white spots may appear; but when you put on your second coat of varnish, you must take care to pass very lightly over the spots you have retouched. The box should be varnished as many as three times after the engraving has been placed on it, and suffered to dry thoroughly each time. The white alcoholic varnish is the best. It should be put on in the sunshine, or near a warm stove. After the last coat is well dried, sift a little pulverized rotten stone through coarse muslin, and rub it on with linseed oil and a soft rag; after being well rubbed, cleanse the box thoroughly with an old silk handkerchief or soft linen rag. Some persons say that a very thin sizing of nice glue should be put on the box before it is varnished at all; others say it is not necessary. This work requires great patience and care; but the effect is very beautiful, and pays for the trouble.

Solitaire Games of Cards.

THERE are very few games one person alone can play. Mrs. Cheney has compiled a collection of these games, under the name of "Patience," which are very desirable. These games are an acquisition to any home. They amuse an invalid, and often act as a sedative to men wearied of business cares, who desire some simple amusement before sleeping. They do not produce the feverish excitement of games of chance and skill played against an opponent. Yet they can become a social pleasure, by others looking on and sharing in the interest of the game, and the pleasure of success. Boys and girls would do well to learn them, as they will not divert the mind from study, yet may help to pass pleasantly an idle hour, besides exercising the *patience*. The publishers have allowed us to give the directions of some of the games; we also will add "The Army Solitaire," and when you play it, think of the pleasure it has given to many a weary soldier, in diverting his mind from the hardships of war. Our famous generals often played it

the night before a battle, and if successful, looked upon it as a good omen. We will add a few simple social games.

1.—THE LEGITIMIST.

TWO PACKS.

THIS name is of French origin, but it seems to have no special adaptation to the game. It may have been applied to it from some old royalist, who solaced his years of exile with the company of mimic kings and queens. It requires close attention, but is not otherwise difficult.

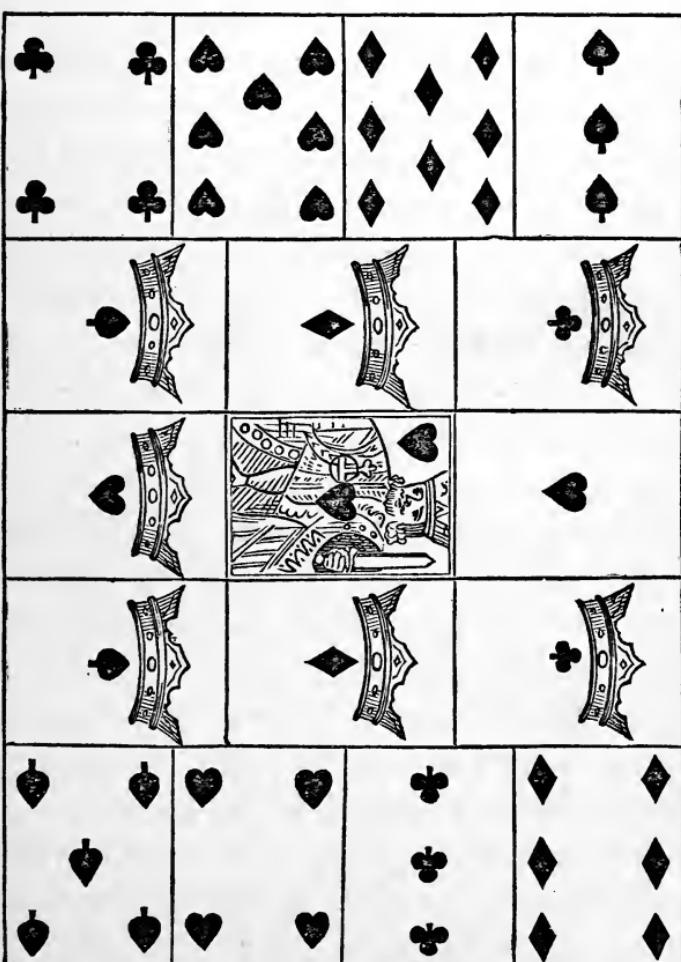
Take a king and place it at the left. Then, having shuffled your cards well together, begin to lay them off. You place in succession, in a horizontal row, next the king, the queen, the knave, ten, nine, eight, seven, and six, as they appear from the pack. On these you form the families of thirteen cards each, piling downwards, not following suit, and ending each family with the number next to the bottom card, so that you will finish, if successful, with a row of piles, whose top cards number from the ace to the seven, inclusive. Put the cards that you cannot immediately use in stock. You can take up this stock, re-shuffle it, and re-lay it twice.

You must be very careful to observe when your families are complete, for as each one ends with a different number, you will be likely to put on too many cards if you are inattentive.

2.—THE SULTAN.

TWO PACKS.

THIS is, perhaps, the most curious and interesting of all the games of Solitaire, and, if successful, it forms a



pretty picture of the sultan or king of hearts, surrounded by his eight queens. As it is rather difficult to under-

stand the arrangement, we have prepared a little diagram to illustrate it.

Take out the ace of hearts and all the kings. Place one king of hearts in the centre. Just above him place the ace of hearts, and below him the other king of hearts. On each side of the ace place the kings of clubs, who represent war. On each side of the first king of hearts are the kings of diamonds, representing the treasury; and on the lower line, each side of the second king of hearts, are the kings of spades, representing the industrial forces.

Then shuffle the remaining cards, and lay off from the pack. Put the first four cards on one side of the square formed by the kings, placing the ends of the cards towards the square. Put the next four cards on the other side in a similar manner; these eight cards form the divan.

Leaving the sultan untouched, form the other families by placing the aces on the kings, and so piling in regular succession, according to suits, ending with the queens. Place all cards which you cannot immediately use, in a pile on the table, which is called the stock. You can use the cards you are laying off from the packs, or the top card of the stock, or any card in the divan, in forming your families. When a card is taken from the divan, you may fill its place, either by the top card from the stock, or by the next card from the pack, as you think most likely to be favorable to your purpose.

When you have exhausted the pack, you can take up the stock and use it as a pack, always keeping your divan full. This you can do twice. Some skill is required in

placing the cards in the divan, and in selecting them for use, and constant care is needed that no opportunity in placing a card in the families escape you. You will, after a little experience, generally be rewarded with success.

3.—FRENCH SOLITAIRE.

ONE PACK.

THIS game is very simple, and well adapted to invalids who cannot make much effort.

Shuffle the cards well. Lay the four aces as they come in a row. Place the other cards as they appear from the pack, on the aces in order, without following suit; as, ace, deuce, three, four, &c.; this is called putting the cards in families.

Place the cards which do not fit on these, in due order in four piles below, and whenever the top card will go on the upper line, in regular sequence, you can use it, which will thus free the card beneath it.

The skill consists in deciding on which of these four piles to place the cards from the pack, and which card to use, if you have two top cards of the same number. Of course you must not, if you can help it, place a higher card on a lower; but if you have already four piles, this will often be unavoidable. You must then endeavor to get off the higher cards, to free those beneath. According to the old, strict rule, of not looking to see what cards are beneath the top card, it becomes an excellent exercise of memory to recall in which pile are the cards

you want at the moment. It is not well to place many cards of the same number in one pile. If you can complete the families in the upper row to the kings, you have succeeded in this game ; if not, you have failed.

You may make this game still easier by taking out the aces, and placing them in the upper row, before beginning the game ; or you may make it more difficult by following suit in the families, in which case you are entitled to take up the lower piles, re-shuffle them, and re-lay them twice.

4. — THE ARMY SOLITAIRE.

ONE PACK.

THE army game is a decided favorite with all who like solitaire games ; we have never *seen* any printed directions, yet there may be in some book we have not had access to. We prefer it to any other game of solitaire, and we hope these directions will be sufficiently plain to interest our readers to try it.

Shuffle the cards thoroughly. Then deal off the first card, whatever it may be, and place it on the upper corner of the left hand side of an imaginary square. This is called the foundation card, on which to form a family. For instance, if it were the six of diamonds, the next card to place upon it would be the seven of diamonds, as the family must be formed in regular succession, according to suit. Whenever you come across, in playing the cards, the six of spades, hearts, or clubs, these are the foundation cards (as the first card dealt gives the requi-

site value of the other three foundation cards, or as some call them, the four towers of the fortress), and can be placed in the other three corners, to form a square. On these build your towers, as we directed in diamonds. If you succeed in forming the four towers or families in suit, and in succession, you have conquered.

When you deal a card that cannot be placed on the corner families in succession, place it on the sides of the square, between the foundation cards, as three of clubs, and nine of spades, eight of diamonds, king of hearts, and one can be placed in the centre of the square, as the ace of diamonds; these five cards are called the reserve forces, and on these you can place any card in downward succession (suits need not be followed), which cannot be used on the towers. For instance, if you deal off the deuce of hearts, or any other deuce, place it on to the three of clubs; or any eight, place it on to the nine of spades; or king, place it on to the ace, so on; but with every card turned, first look at your foundation cards, or towers; never lose an opportunity to build up these. All cards that cannot be played on to the four towers or the five reserve cards, may be placed on one side as stock.

Whenever any one of the five reserve corps cards are vacant from being used to build up the towers, or a vacancy made by being able to place reserve cards on the other reserve corps, replace from the stock, and by taking a card from the stock, a desirable card to use on the towers may be freed.

The great skill of this game consists in the judicious arrangement of the reserve corps; if you have two top

cards on different piles, of the same value, you should carefully consider on which pile it is best to place the card dealt of proper value, for future use.

If you can complete your towers in the first play, without shuffling your stock, you have gained a great victory ; the stock can only be shuffled and played over once. If the towers cannot then be built, the game can be commenced anew. Sometimes the cards deal out so perversely that even skilful play and patience cannot build the towers.

The Toilet.

THERE are many boys and girls who pride themselves on their utter disregard of their personal appearance, most fully comprehending the old phrase "that beauty unadorned is adorned the most," or perhaps think it a mark of genius to appear so occupied with study as to neglect their person. Such boys and girls are repulsive to both God and man. One of the first laws Nature teaches us, is perfect cleanliness. Look at the birds and squirrels; indeed, all wild animals are taught by instinct to take a daily bath, if possible. Tame animals are less cleanly than wild ones in their habits, as far as our observation goes. They look to man to cleanse them. But God teaches the untamed beast and bird laws of cleanliness. Look at the woods! God sends the rain to wash them, and the winds to sweep them, and the sun to brighten them. The Creator of all gives to every boy and girl the mind to know how to take good care of their own persons, and if they neglect the laws of health, just so sure will come bodily suffering. Besides, it is a Christian duty, as well as a social duty, of every boy and girl, to make the most of all their personal attractions, and to preserve every agreeable quality they may have been endowed with, to the latest period of their lives. *It is not*

vanity. It is a duty we all owe to ourselves, and we owe it to others. Habits rightly formed in youth will often prolong life, and add tenfold to any personal attraction.

We trust all boys and girls who read this book, will not pass over this chapter on the toilet. We will try and give them some useful hints and recipes.

In the first place, every boy and girl, no matter how young, should strive to make their sleeping and dressing apartment attractive. *Perfect neatness* is an essential quality in every room. Never leave any article of clothing on a chair, table, or floor, which can be either neatly folded and placed in a drawer, trunk, or closet shelf, or hung on some nail placed for that purpose. Never leave a draw partly open. We once knew a young girl who was always leaving her drawers open, and articles of dress hanging from them. One Christmas, before a room full of friends, she received from the Christmas tree a little bureau, with every drawer partly open, and things hanging out of each drawer. Of course it was soon known to all *why* she received such a gift. That lesson she *never* forgot. We must confess it also cured us of the careless habit of leaving drawers partly open. We hope our young friends will take this lesson to heart, and profit by it.

When you rise in the morning, always (even if you can afford plenty of servants), throw the clothes of your bed carefully over the foot-board, or some chair, to give your bed a sufficient chance to be well aired — a most necessary requisite for health. Before leaving your room, even in midwinter, open your window. Never allow

your bed to be made till thoroughly aired. Though you are not blessed with even a competency, you can make a plain room attractive. A few pictures on the walls, and by covering a plain pine toilet table with pretty, cheap chintz, and exercising a little ingenuity in making pretty articles of furniture out of old boxes. But always be a foe to all dust ; keep a dusting cloth at hand. After washing, if you cannot have a chambermaid, arrange your washing apparatus neatly, and carefully spread your towels to dry, if clean. There are so few, comparatively, in America, who can afford the constant attendance of servants, we desire all boys and girls to learn how to care for themselves.

1.—THE BATH.

IN olden times, in this country, baths were but little used. It was considered a luxury but few could possess. Now there is scarcely a decent house built without a bathroom. In England and France, “there was a time when many ladies had a most hydrophobiacal dread of water ; they thought it injured the delicacy of the complexion. Their ablutions often consisted in wiping the cheeks with a cambric handkerchief, dipped in elder flower or rose water.”

A daily bath is now the rule rather than the exception, and its effect is admirable. A cold bath, from sixty to seventy degrees, is, to most persons, the most health-giving and invigorating process one can undergo ; but beyond its invigoration, it is of no essential service in

cleansing the skin. No one can preserve a purely clean skin by the use of cold baths only, though the purifying effect is increased by the use of rough towels, which help to remove the impurities from the surface of the skin. The skin is constantly throwing off fine dust like scales, and these, blending with other foreign matter, stop up the pores, and prevent the skin from performing its natural functions.

Therefore soap should be used, because the alkali in it assimilates with the oily exudations of the skin, and removes impurities.

It has been said that soap is calculated to irritate the skin, and injure the complexion. It is not true, according to our knowledge. Some of the most beautiful complexions we ever saw were washed with soap daily. Great care should be taken that the soap is of a *good quality*.

If any unpleasant sensations are experienced after its use, it is easily removed by rinsing the skin with water slightly acidulated with lemon-juice.

Once a week a warm bath, at about one hundred degrees, should be used, with plenty of soap, to be sure and cleanse the skin from all impurities. Sea-water baths are invigorating, but not cleansing — a warm bath is required after a short course of them. The same remark applies to sea-salt baths, now much used. The friction of coarse towels is very beneficial. Shower baths are not generally desirable, as but few constitutions can bear them.

Milk baths and perfumed baths are absurdities, which a very few silly women indulge in; but nothing equals pure salt water.

Of late years the practice of taking Turkish baths has been introduced. Doubtless these baths are the best in existence for a thorough cleansing of the pores of the skin. But no one should venture to take them, except after having first had medical advice; or those who possess strong constitutions; for there are states of health to which they would be injurious in the highest degree. We consider them a great luxury.

We also recommend, most heartily, the sponge bath for daily use. Use a large circular sponge.

It is always best, before taking any bath, to wet the top of the head; boys and men can wet the sponge, and, holding their heads over the bath-tub, thoroughly souse their heads and necks. It prevents the blood rushing to the head suddenly. A hair glove is excellent to rub the body. Boys and men should exercise with the dumb-bells after their morning bath; it increases their muscular strength.

In all our directions with regard to the bath, it must be borne in mind that we only refer to those who are in a moderately sound state of health; otherwise their medical attendant should be consulted. Sea-bathing is admirable to all those who can bear it; but persons of a bilious temperament, or with heart disease, and even some with apparent health, may suffer serious ill consequences from a single bath. Some constitutions cannot bear the plunge into any cold water. All who have a quick reaction from a sea-bath and cold water bathing are benefited. The delicious glow it gives is most charming. We have known many young, vigorous persons suffer from sea-bathing; but it was their own fault,

from remaining in the water too long; ten minutes is sufficient.

2.—COMPLEXION.

WE will only give a few words of advice, as an assistance in the preservation of the complexion.

Rise early, and go to bed early. Take a plenty of exercise. Keep the pores of the skin open by perfect cleanliness. Be moderate in eating and drinking. Do not often frequent crowded assemblies, and *shun cosmetics, and washes for the skin.* We will give a few harmless recipes. But most of the powders and washes used dry up the skin, and in the end make it rough.

Be careful always in washing to wipe your skin dry, particularly your hands; rub them briskly for some time. If hands are left moist after washing, they will chap, crack, and become red. Honey is excellent to rub over chapped hands, or anoint them with cold cream or glycerine before retiring to rest.

If you desire to make your hands delicate, wash them in hot milk and water for a day or two; on retiring to rest rub them with palm oil, and put on gloves; wash them well in the morning. Lime water, lemon-juice, or sour milk will remove the sunburn from hands. Above all, keep the nails scrupulously clean.

It is repulsive to see a lady or gentleman, however well-dressed they may be, with nails in any degree shady. We were once, in travelling, impressed with the beauty of a young lady sitting near us. We spoke of her to a young gentleman sitting by us. He exclaimed, "Look

at her hand! did you ever behold such a little black row?" She had just drawn off her glove, and diamonds glistened on her taper fingers ; yet "that little black row" cast a shade over her beauty.

The nails should be pared only once a week, after washing, as the nail is then soft. Round them nicely at the corners, and press the cuticle at the bottom of the nail carefully down with the towel after washing. Never bite your nails. It gives a stumpy appearance to the nail. Also, never scrape the nail ; it makes them wrinkle.

Warts young people are sometimes troubled with ; the best cure is to purchase a stick of lunar caustic, — which is sold in a case or holder, — dip the end in water, and touch the wart twice a day ; cut away the withered part before applying the caustic a second time,

There are two kinds of freckles. "Cold freckles" are constitutional, and we do not know of any remedy. "Summer freckles" are caused by the winds and the sunshine. The cause assigned for this is, that the iron in the blood, forming a junction with the oxygen, leaves a rusty mark where the junction takes place. The obvious cure is to dissolve the combination. We have had given to us several recipes which are said to be excellent. We will give the best of them.

3.—RECIPE TO CURE FRECKLES.

INTO half a pint of milk squeeze the juice of a lemon, with a spoonful of brandy, and boil, skimming well ; add a dram of rock alum."

4.—A CURE FOR FRECKLES.

SCRAPE horse-radish into a cup of cold sour milk; let it stand twelve hours, strain, and apply two or three times a day.

5.—A CURE FOR FRECKLES.

MIX lemon juice, one ounce; powdered borax one quarter dram; sugar, half a dram; keep a few days in a glass bottle, then apply occasionally.

6.—A CURE FOR PIMPLES.

MANY of our young people are much troubled with an eruption upon the face. It often proves a great annoyance to them; but there is a simple remedy, which, if it does not effect a complete cure, will obviate the trouble in a great degree, without the least injury to the health or skin.

To one grain of corrosive sublimate add one ounce of rose water; filter, and apply twice a day.

7.—HAIR.

It is impossible for a lady to possess anything that so adds to her charms as a good head of hair. "It is a crown of beauty." This accounts for the enormous

amount of advertisements of infallible hair tonics and restorers. Beware of such advertisements. We will give you some few simple and most essential rules to preserve the hair. Also some recipes (easily and cheaply made) of the most excellent pomatums. The skin of the head is delicate, therefore especial care should be taken in brushing the hair, and in keeping the scalp as clean as possible. The brush should be of moderate hardness. The hair should be separated, in order that the head itself may be well brushed, as by so doing the scurf or loose skin will be removed ; if suffered to remain it becomes saturated with perspiration, and weakens the roots of the hair, causing it to fall off. To retain a beautiful head of hair, it ought to be brushed twenty minutes in the morning, and ten minutes when dressed in the middle of the day, and a like period at night. In brushing or combing it, begin at the extreme points ; and in combing, hold the portion of hair just above that through which the comb is passing firmly, so that if it is entangled, it may drag from that point, and not from the roots. We have known the finest heads of hair ruined by careless combing and breaking the hair.

It depends upon the nature of the hair whether pomatum is required. Those whose hair is naturally oily and glossy need nothing to make it so ; but dry hair requires it. Pure salad oil, scented, is excellent, and bear's grease. An excellent pomade is made of beef's marrow, after it is clarified ; take six tablespoons of the marrow, heated, and six tablespoons of scented castor oil, to one tablespoonful of brandy or rum. Stir these ingredients half an hour, until it is beaten to a cream ; then place it in your jars.

8. — CARROT POMADE.

THIS is another excellent recipe. Two thirds beef's marrow, one third leaf lard unsalted, one carrot grated fine, simmered together for two or three hours.

These pomades should be applied with the hand or a soft brush, and rubbed into the hair thoroughly. Be careful and not oil the hair often, for an over oiled head is offensive. It is well to rub the hair at night with a piece of flannel, so that the oil used in the day may be removed. Every month the hair should be shampooed. A few drops of ammonia in rain water will cleanse it well; put the whole hair into the solution, and wash it; then cleanse it with clear milk-warm water, and clip all the ends of the hair without fail. Every split end will, if not cut off, deaden the hair. Another good cleansing recipe is, one ounce of powdered borax, a small bit of camphor, dissolved in a quart of boiling water. With any recipe for cleansing, the hair must be rinsed thoroughly with clear spring water. All boys and gentlemen should wash their heads all over, hair and all, every morning, and wear ventilated hats. Gentlemen become bald sooner than ladies from wearing close hats so much.

9. — BANDOLINE,

A FRENCH recipe, is excellent — because it is harmless — to use in dressing hair to keep back any refractory locks.

Recipe. Simmer one ounce of quince seed in a quart

of water, forty minutes ; strain cool, add a few drops of scent, and bottle, corking tightly.

Another way of making "Bandoline" is with Iceland moss. Take a quarter of an ounce, boiled in a quart of water, and a little rectified spirits added, so that it may keep.

A weak solution of isinglass is the only curling fluid that is harmless.

10.—COLD CREAM

Is excellent for a lip salve. The recipe is a pint of sweet oil, half an ounce of spermaceti, and two ounces of white wax, melted together over the fire and scented ; or take a pint of oil of sweet almonds, one ounce of white wax, half an ounce of spermaceti, and half a pint of rose water, beat to a paste.

11.—RECIPE FOR CAMPHOR ICE.

HALF a cake of white wax, a good inch of a pure spermaceti candle, a piece of camphor as large as an English walnut, a tablespoonful of sweet oil, mix and simmer all together ; if too soft, add more wax, if too hard, add more oil. This is excellent to use in cold weather for lips and hands.

This being prepared for a home book, we give a few recipes for the use of the toilet, which we know are good.

We will give one more most excellent recipe for a cooling and healing salve.

12.—CUCUMBER SALVE.

HALF a pound of pure lard unsalted, a heaping quart cup of cucumbers sliced as for eating ; let them simmer an hour, so as not to boil, then strain into cups.

13.—TO LOOSEN STOPPERS OF TOILET BOTTLES.

LET a drop of pure oil flow round the stopper, and stand the bottle near the fire. After a time tap the stopper with the handle of a hair brush ; if this is not effectual, use a fresh drop of oil, and repeat the process.

14.—TO REMOVE A TIGHT RING.

WHEN a ring happens to get tightly fixed on a finger, take a piece of common twine, soap it thoroughly, and then wind it round the finger as tightly as possible. The twine should commence at the point of the finger, and be continued till the ring is reached ; the end of the twine must then be forced through the ring. If the string is then unwound, the ring is almost sure to come off the finger with it.

15.—HAIR WASH.

As much borax as a pint of hot water will absorb, three tablespoonfuls of best olive oil, twenty drops of almond essential oil. This recipe we recommend most heartily. It must be well shaken before using.

16.—A CURE FOR POISON.

SWEET oil is a cure for the poisonous bite of serpents, spiders, &c.; also for being poisoned by ivy and dogwood. Bathe the part bitten or affected, and take a teaspoonful internally. If a horse is affected, it will require eight times as much to affect him. All persons sensitive to poison whenever they visit the woods, on their return should wash hands and face in vinegar and salt, and take camphor inwardly.

Home Reading.

THE subject of reading cannot be omitted in a work devoted to the interests of the home. Books have such a large share in developing and sustaining the home life, that their influence can hardly be exaggerated. At the same time it is not possible, in a comprehensive work like this, to treat of the subject as its importance demands. We can only throw out a few general hints, which may be suggestive to some.

In the first place, we would say to all young persons into whose hands this book may come, *read something daily*. And by this we mean, not the careless looking through a novel for the amusement of a leisure hour, but the faithful, thorough mastery of another's thought. It is of less consequence that that thought should be new, or specially valuable, than that the habit should be formed of intelligent reading. A poor book well read will usually teach a young person more than a good one read carelessly. We are not saying, let it be understood, that a book should always be read from beginning to end ; there is a habit of quick perception of the general tone and value of a book, which, to a student in search of facts for special use, is of the greatest assistance ; but this

comes later. The power of attention and concentration should first be gained. And for this purpose, secondly, it is important that you should *form an opinion of what you have read*. Never lay aside a book until you can state intelligibly the author's purpose and meaning in it, and how far, as it appears to you, that purpose has been attained. It is an excellent plan to write a short abstract of the plot of a story, or the facts of a biography ; but whether this is done or not, do not be contented to let what you have read pass through the mind like water through a sieve. Compel everything to yield you some tribute of suggestion, if not of direct instruction. Do not be satisfied with anything less than a definite opinion ; if you are in the wrong, the correction of a maturer mind will help you to judge more truly the next time.

Do not confine yourself to one kind of reading. If you are fond of novels, that is no reason why you should read them exclusively. Perhaps acquaintance with a different class of books may develop a taste for them ; at any-rate you cannot afford to read entirely for amusement. It is neither our province nor our wish to condemn novel-reading ; the excessive practice of it will, we believe, be best checked by acquaintance with books of greater value. There are histories as varied in incident as any novel. There are books of travel which combine the romance of adventure with the instruction of facts. There is poetry in all its forms, without some knowledge of whose best examples your education cannot be considered even passable. The fact is rather that there is so much of each class, which a cultivated person is expected to be familiar with, that the great difficulty is in

selection. In order that you may divide your time profitably among these different studies, it is well to take the advice of some competent person as to *what is the best book for your purpose on a given subject*. In this manner you will save much time and patience, while if you take up the first book on the topic in question which comes to hand, you may, by an injudicious choice, lose your interest in the whole matter. On any historical question, for instance, it is better to read at first an author who gives a concise and general view of the events of the period, and afterwards those entering more minutely into details. It is well, too, before intrusting yourself to the guidance of any historian, to ascertain the estimation in which he is held by competent critics, that you may thus understand how to separate the truth from exaggeration and special pleading.

Have several kinds of reading for every day. Do not give yourself up entirely to one class of books at a time, or you will either tire of them, or your judgment will become confused in regard to them. It is well to have some book of history, or travels, or metaphysics, another on religious subjects, and a third for entertainment simply — a *good* novel, if possible.

In this way much more knowledge is gained without fatigue, than when the mind is kept exclusively to one theme.

Committing to memory a few lines every day, is a habit which cannot be too strongly urged. It need not be made a tedious matter, by giving up one's whole time and attention to it as a study ; it can best be done when walking, or sewing, or engaged in household work, and

will become, after a little, a pleasure instead of a task. Besides the daily acquisition of something worth remembering, there will be gained also a power quite as valuable, of observing the characteristics and style of various authors, the delicate differences of words, and the construction of sentences. It may safely be said that those writers who have been most celebrated for beauty and perspicuity of style, have owed this, in no small degree, to the early habit of committing to memory the works of the best authors.

In conclusion, we would beg our young readers to make friends of books. They will cheer many an hour that would otherwise be lonely; they are kind, ever ready, yet unobtrusive comforters in perplexity or sorrow; they represent that which is best and truest in all ages, and are the highest expression of itself, of which humanity is capable.

The Sick Room.

WE cannot leave this book without giving a few simple rules for nursing the sick. Most of our young people, and many old, are ignorant of the commonest principles.

Never wear a rustling dress or creaking shoes in waiting on the sick. Be careful not to shake the bed, or fidget near it, so as to touch, disturb, and needlessly fatigue the invalid. Few noises are more irritating in sickness than noise from the grate. The startling effect of putting on coals may destroy the effect of an opiate. It is better to put them on one by one. In voice and manner be *gentle*, and in spirit *cheerful* and *hopeful*. Do not depress by tears, but control looks, words, and actions. Say nothing in the room, or even outside the door, which you would not wish the sick to hear. Ask questions but rarely, and never occasion a needless effort to gratify your own curiosity. In giving nourishment with a spoon, be careful to raise the bowl of the spoon so as not to drop anything, or annoy the sick person by untidy feeding. Be sure to have cups, spoons, and glasses clean. Make everything as attractive as you can from the nicety and freshness of the dish. Do not allow jellies or rejected dainties to

remain in the room. The time may come to any boy or girl when they may desire to watch by a sick bed of a parent or friend, and the above rules may assist them.

If the sick person should take a dislike to you, be not disheartened at it ; but if possible resign your place by the bedside. It may be that you were clumsy, and awkward, or over-anxious. It may be only one of those unaccountable fancies which sometimes takes possession of the sufferer, and which it is our duty to treat with care and consideration.

1.—COOKING FOR THE SICK.

BEEF TEA. Take one pound of beef, without any fat, cut it in very small pieces, and put it in a bottle ; cork it and put it into a kettle of water, and boil it until the juice is exhausted ; this will do for very sick people who can only take a teaspoonful of nourishment at one time. Take a pound of lean beef, cut it up fine in a quart of cold water, let it boil an hour, then salt it, and put in a pinch of cayenne pepper, strain it, and it is ready for use. This given to a person troubled with sleeplessness (from general debility), about a half cup full just before retiring, will generally enable the patient to sleep.

2.—PORT WINE JELLY.

TAKE a half pint of port wine, one ounce of isinglass, one ounce of gum arabic, one ounce of loaf sugar ; let it

simmer for a quarter of an hour, stirring it till the gum and isinglass are dissolved, then pour it into a mould. When cold it will be quite stiff.

3.—TOAST WATER.

BROWN thoroughly, but not burn to a cinder, a small slice of bread ; put it into a pitcher, and pour over it a quart of water which has been boiled and cooled ; after two hours pour off the water ; a small piece of orange or lemon peel put into the pitcher with the bread improves it.

4.—TO PREPARE RENNET WHEY.

GET a rennet, such as is used for cheeses. Then take a piece two inches square, or a little larger, rinse it first in cold water, then pour on to it two table-spoonfuls of hot water, and let it stand a half hour in a warm place. Take three pints of milk, and heat it blood warm. Then pour in both the rennet and water, and stir it in well. Cover and let it stand in a warm place, to keep the milk of an even temperature ; it must not be moved until it turns to a curd ; then cut up the curd with a spoon and strain it, and boil up the whey once. It is then ready for use. If in an hour it does not turn to a curd, take out the rennet, and put in some more freshly prepared. It will then surely curd.

5. — FLAX-SEED SIRUP.

THIS we know to be an excellent remedy for a cough. Boil one ounce of flax-seed in a quart of water for half an hour ; strain, and add to the liquid the juice of two lemons and half a pound of rock candy. If there is a soreness and general weakness from the cough, add half an ounce of powdered gum arabic.

6. — MUCILAGE OF SAGO.

TAKE an ounce or a table-spoonful of sago, steep in a pint of water, in a pan placed on the back of the stove for two hours, then boil for fifteen minutes, stirring it all the time. This mucilage can be sweetened with sugar and flavored with lemon juice, or milk can be added.

7. — APPLICATIONS FOR THE SICK. — REFRESHING LOTION.

MIX one table-spoonful of vinegar, one of eau de cologne, and one of water. Dip a linen rag or a hand-kerchief into this preparation and lay upon the head. It refreshes a patient.

8.—RECEIPT FOR CROUP.

ONE tea-spoonful of powdered alum mixed with molasses or lard, and sometimes water; make a child with croup swallow it; it is a quick emetic.

9.—REMEDY FOR SORE THROAT.

TAKE a tea-spoonful of chlorate of potassium and dissolve in a tumbler of hot water, and gargle the throat every two hours.

10.—BURNS.

DISSOLVE alum in water, and bottle ready for use; or common lime-water; either remedy applied at once will relieve a burn and draw out the fire. Pour the solution into a bowl, and hold the burnt place, if possible, into it, or wet cloths with it. Sweet oil and laudanum can be added to the lime-water.

We simply give a few remarks for ordinary troubles, which may be useful; but we cannot leave this article without giving some useful rules for making *good bread*, which few make, and every young girl should learn how to do, as good bread is essential to the health of every household. An experienced housekeeper has kindly prepared for us the following article.

Directions for making Bread, Yeast, &c.

HOLY WRIT assures us that bread is the staff of life, and experience fully proves the assertion. Yet many of us know not how to make this needed support. Every girl, no matter what her station in life may be, should learn how to prepare it in its *highest excellence*.

The word *bread* is derived from brayed grain, from the verb to bray, or pound; indicative of the method of preparing the flour.

Dough comes from the Anglo-Saxon word *deawian*, to wet or moisten. Loaf is from the Anglo-Saxon *lif-ian*, to raise or lift up, as raised bread. Leaven is derived from the French verb *lever*, to raise.

Dwellers in country towns and villages are forced to prepare the leaven, or yeast; so we append a receipt which never fails to make good bread. Wash and pare six good-sized, white-fleshed potatoes, grate them raw, on a ~~lemon~~ grater. Pour over them three quarts of boiling water; it will thicken up like starch. Add one table-spoonful of salt and half a cup of sugar. When the mixture is lukewarm, pour in one cupful of yeast. Set the pan beside the stove, and in six hours it will be light enough to use. Let it stand over night in a cool place; next morning cork it tightly in a jug. Keep it in

the cellar or ice-house ; but be sure that it does not freeze — that kills the life of it. Home-made yeast requires double the quantity of baker's yeast. One teacupful of this yeast will make three loaves of bread and a pan of biscuit.

Potatoes added to the bread increases its bulk and quality. Boil six common-sized potatoes in two quarts of water, with one table-spoon of salt. When perfectly salt, mash fine on a plate, leaving no little particles. They can be rubbed through a colander and reduced to a pulp ; turn it into the bread-pan, and pour over the water in which they were boiled. Sift eight quarts of flour, and when the potato-water is cooled, so as to be a little warm to the touch, stir in half the flour ; then add one teacupful of the yeast. When that is thoroughly mixed up, put in the rest of the flour, making it thick enough to knead stiffly. Do this in the evening, and place the pan in a warm room in winter, a cool one in summer. Early next morning it will be risen finely. Another pan should have been tightly covered over it, and it will rise up into the pan. Knead it thoroughly on the moulding board, chopping it with a chopping-knife, or pounding with a pestle. Bread must be kneaded for an hour at least, if one desires the best quality. Holes in the slices of bread show that it was not well made. The superiority of the French bread-makers is owing to this cause. In many bakeries the dough is prepared by machinery. After the process of kneading is finished, rolls can be made, and baked for breakfast. They are prepared by rolling the dough in the shape of a rolling-pin, then cutting off a small portion, and rolling that in the same shape. Dip

the sides and tops in melted butter, place in a pan, and put them in a warm place for twenty minutes ; then bake in a hot oven twenty minutes. The melted butter causes them to break apart perfectly, and to brown handsomely.

The remainder of the dough is placed near the stove to rise a second time. It must be closely watched — *ten minutes' neglect will sour it.*

To be sure a teaspoonful of saleratus will sweeten it ; dissolve it in warm water, and mix it in so there will be no yellow spots ; but, if used, it takes away the fresh sweetness of the bread. Making bread is not like cake or pie-making — *it demands close attention* ; will not be neglected without injury. It requires some brains to make good bread, and that is one reason why so many families rarely know what the best quality of bread is. If it sours, turn in the saleratus ; if it is half-kneaded, and half-risen, and the oven is ready, why, bake it, and thus very poor bread is the result ! Bread cannot be set aside for dish-washing or sweeping. It must be of the *first consequence.*

When it is risen for a second time, and blubbers appear, flour your moulding-board, turn out the dough, cut it into as many parts as you desire loaves of bread, and knead, pound, or cut each loaf *well* ; then have your bread-pans buttered, and put in the dough, kneading it into the corners of the pan. Prick it all over with a fork, place near the stove for fifteen or twenty minutes, or until it has filled the pans to the brim. Have your oven so hot, that if a sprinkling of flour is thrown in, it will brown quickly, but not burn ; then set in the pans.

Three quarters of an hour, in a properly heated oven, will bake bread. Don't burn your crusts, but watch the oven, and in twenty minutes after putting them in, look at them and turn the pans round, for usually one side of an oven bakes the fastest. When it is baked, take it from the pans directly, else the sides will become moistened and clammy. Spread a clean towel on the table or shelves, and stand the bread on it. If the crust is too thick and brown, wrap the loaves in a clean towel wet with cold water; this softens it.

If these directions are closely followed, and a good brand of flour is used, no girl can fail to make A No. 1 bread.

No lady can teach her servants unless she has learned the alphabet of cookery herself, and bread may be called the A B C's of the kitchen.

1. — WAFFLES.

TAKE one quart of milk; melt in the milk a large spoonful of butter; beat up four eggs, and add to this mixture a little salt; add to the slightly warm milk a small gill of yeast, flour sufficient to make a batter just right for a waffle iron, or a little thinner to bake on a griddle iron. The batter for waffles is also nice baked in tins as muffins. Some elder person can direct, the first time you make this recipe, the proper thickness of the batter.

2.—A CREAM TOMATO SOUP.

TWELVE tomatoes, skinned and cut up, cook thirty minutes (or a quart of canned tomatoes, ten minutes will cook it). When cooked, stir in quarter of a teaspoonful of soda; when done foaming put in two large crackers, rolled fine; one quart of milk, salt and pepper to taste; stir in a piece of butter nearly the size of an egg; let it all boil up once, then serve for dinner.

3.—BREAKFAST CAKE.

THREE table-spoonsful of sugar, two of butter, two eggs, one teaspoon of soda dissolved in a cup of milk, two teaspoons of cream of tartar mixed into a pint of wheat flower, beat well and bake quickly.

4.—MOLASSES GINGERBREAD.

THREE cups of flour, two of molasses, one of boiling water; dissolve in this, butter the size of an egg, half a teaspoonful of soda, dissolved in a little hot water, one large spoonful of ginger, and one of cinnamon. Bake in bread tins until done, which can be ascertained by pricking it with a broom corn; if none of the gingerbread adheres to the stick, it is done. This is the way to ascertain if any kind of cake is done.

5.—PLAIN COOKIES.

ONE cup of molasses, one half a cup of milk (sour if possible), dissolve a teaspoonful of soda in the milk. One table-spoonful of butter, flour sufficient to make it stiff to roll out and cut in any shape desired.

6.—MOONSHINE CRACKERS.

ONE quart of flour, one table-spoonful of butter, a tea-spoonful of salt, rub these into the flour and turn it on to the moulding board; turn into it a small tumbler of ice-water; knead the water in little by little. Then pound it with the rolling pin fifteen minutes; roll as thin as possible, and cut out as you do cookies; round cutters are the best for crackers; mark with a jagging iron, and bake ten minutes.

7.—NEW YEAR'S COOKIES.

RUB three quarters of a pound of butter into a pound of flour. Take a half pint of boiling water and pour over a pound and a half of light brown sugar in a bowl; dissolve a small teaspoonful of soda in two large spoons of hot water. Add flour *only* sufficient to roll out very thin; cut it out in oblong shapes with a jagging iron; bake *quickly in a hot oven*. In New York they mark these cakes with mottos, — Christmas and New Year's.

8.—SPONGE CAKE.

Two cups of fine-powdered sugar, two cups of flour, six eggs, one large lemon, or one and a half of small size ; beat the yolks of the eggs and the sugar and grated peel of the lemon together ; beat the whites separately, and stir into the sugar, &c., with the flour ; this makes one good-sized loaf, or two small ones ; be careful and not have too hot an oven.

9.—LOAF CAKE.

Two cups of light wheat dough, one of sugar, half a cup of butter, two eggs, half a teaspoonful of soda, one grated nutmeg, two teaspoonfuls of ground cloves, two of cinnamon ; stoned raisins can be added, half a cupful ; mix all together. This makes one loaf.

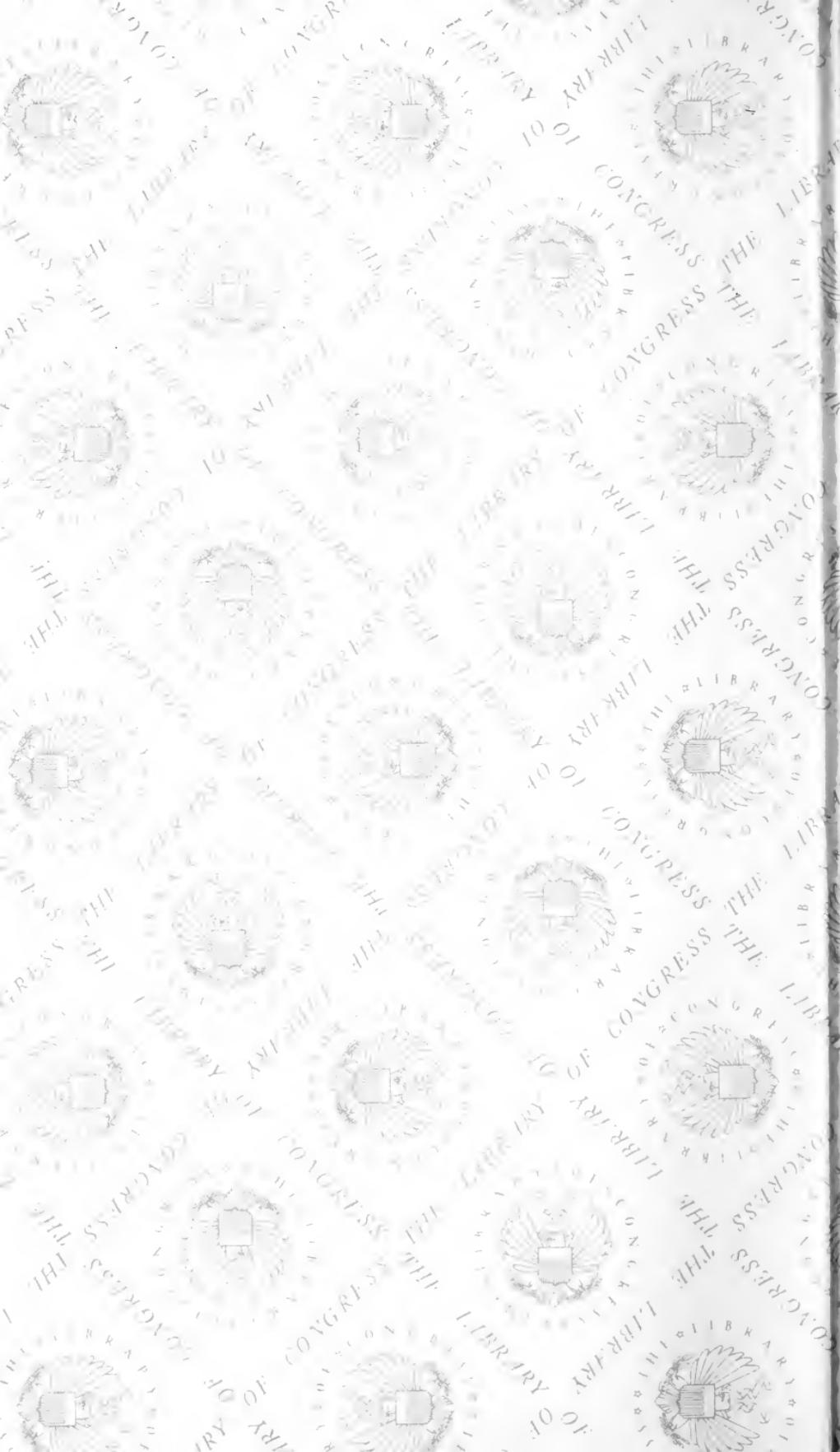
Neatness is essential in cooking. Wash your hands often. Baking badly spoils the best of cake and bread. Learn of an experienced person the proper degree of heat.

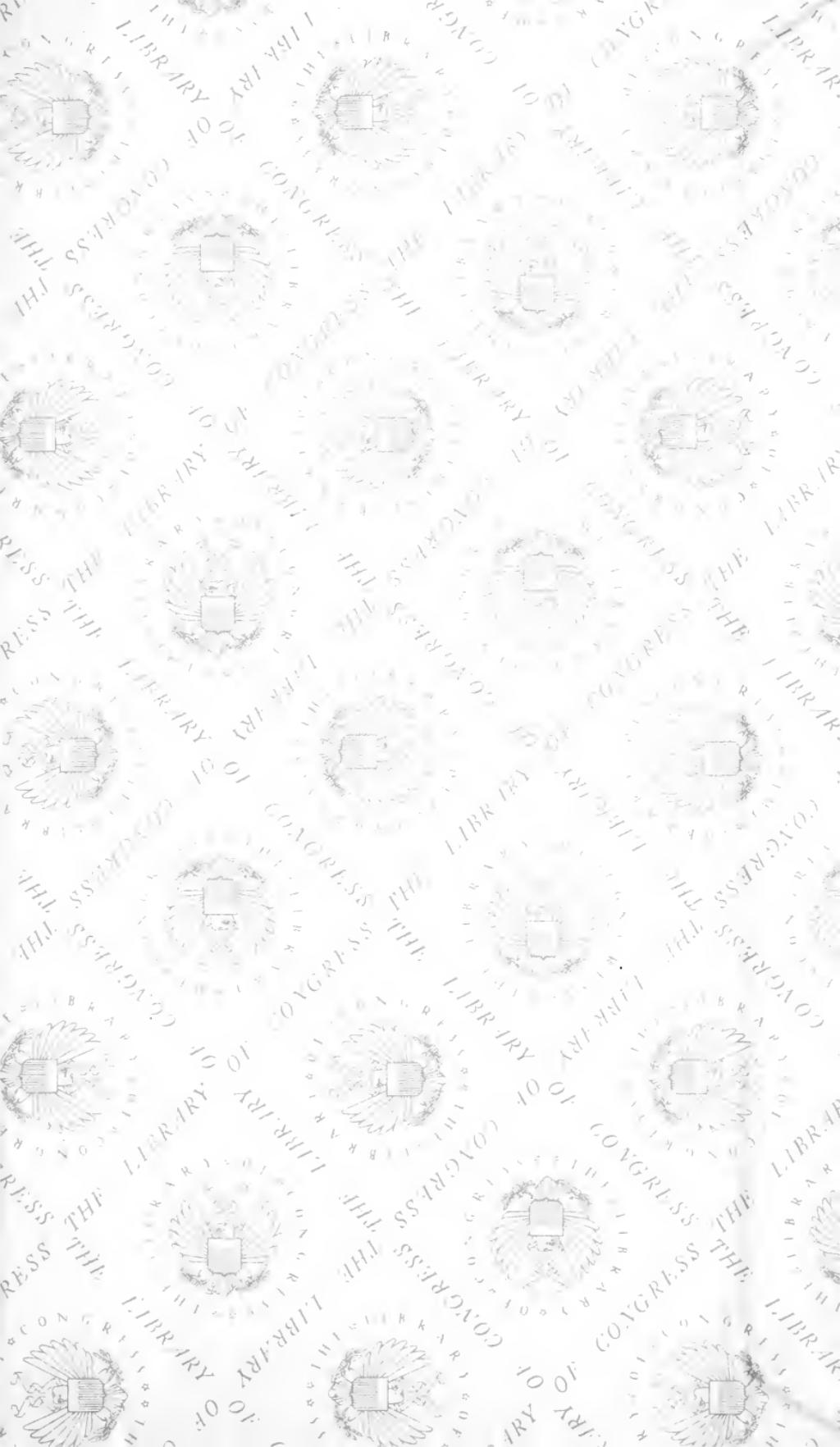
Politeness.

WE will give a few simple rules, which we hope all will read and remember.

1. Talk but little in the presence of your elders, unless spoken to. Learn to be a good listener.
2. Never enter a room, church, or hall first, with an elder person ; let them go *first*.
3. On entering a house or room, always speak *first* to the *lady of the house*, and always take leave of her *first*.
4. Never take the most comfortable seat or position in a room, if there are older persons present.
5. *Let the golden rule Jesus Christ gave us ever be your rule of action.*

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